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The World's Commerce and American Industries

Graphically Illustrated by 36 Charts

Macfarlane

Published by

The Philadelphia Commercial Museum

Philadelphia, Pa.

1905

Price, 50 Cents

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The World's Commerce

and

American Industries

Graphically Illustrated by Eighty-six Charts.

PREPARED BY
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PUBLISHED BY
THE PHILADELPHIA COMMERCIAL MUSEUM.
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THE FOLLOWING CHARTS illustrate the progress and present condition of the commerce of the world, of the manufacturing industries of the United States, and of British and American shipping.

This graphic method shows more clearly than statistics alone would do, what proportion of the world's trade belongs to each of the principal nations, and the relative importance, from a manufacturing standpoint, of the leading cities of the United States.

An alphabetical list of the cities of the United States, having an output of over $20,000,000 of manufactured goods, according to the census of 1900, is also given with the leading industries of each city.

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Chart 1 gives the commerce of the world, by grand divisions, for the year 1900. It shows that Europe has two-thirds of the world's commerce, United Kingdom one-fifth, Germany one-eighth, and United States one-tenth. Charts 2 to 7 give the commerce of the grand divisions by countries. The United States alone has more commerce than the whole of Asia, and twice as much as either Oceania, South America or Africa.

Charts 8 to 20 give the import trade of the leading countries in each grand division. The United States is first in the value of imports into the United Kingdom, Germany, Canada and Mexico, and is second in the value of imports into France and Japan. More than two-thirds of the imports into Canada, and over one-half of those into Mexico are from the United States. The United Kingdom is first in the value of imports into France, Japan, Cape Colony, Egypt, United States, Argentina, Chile and Australia, and is second in the value of imports into Germany, China, Canada and Mexico. Germany is second in the value of imports into Argentina and Chile. Hongkong has about 40 per cent. of the import trade of China. It is a free port, belonging to Great Britain; goods from all nations are landed there, and afterwards reshipped to China and other Oriental countries.

Commerce of the World in 1900

Aggregate of Imports and Exports

$21,784,000,000

1

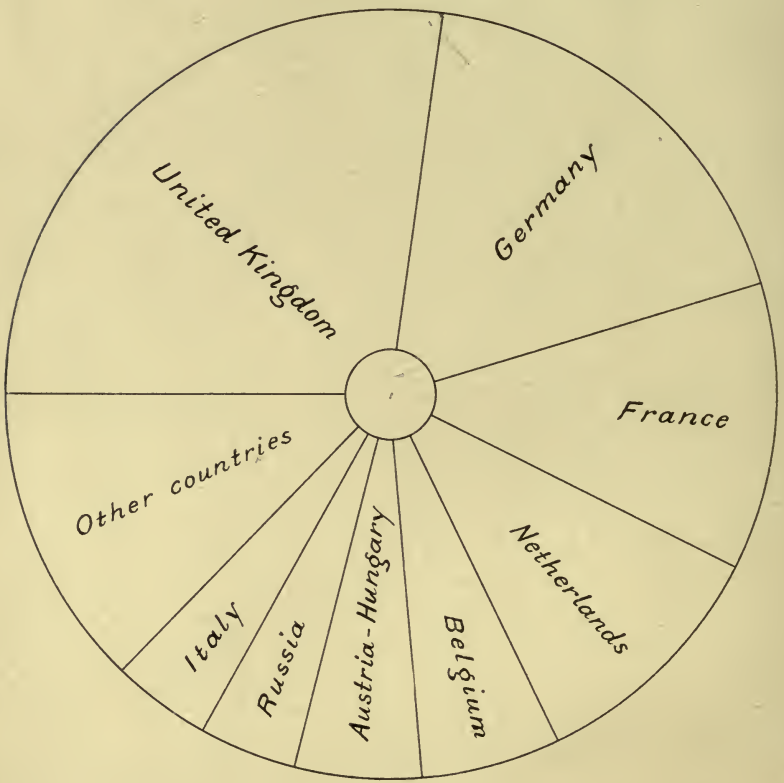
(Values given in Millions of Dollars.)

	Imports.	Exports.	Total.
United Kingdom	2,545	1,416	3,961
Germany	1,372	1,157	2,529
France	906	800	1,706
Other Europe	3,341	2,697	6,038
United States	829	1,453	2,282
Other North America	412	407	819
South America	324	497	821
Asia	1,018	970	1,988
Oceania	434	468	902
Africa	448	290	738

Commerce of Europe in 1900

Aggregate of Imports and Exports

$14,234,000,000



2

(Values given in Millions of Dollars.)

	Imports.	Exports	Total.
United Kingdom	2,545	1,416	3,961
Germany	1,372	1,157	2,529
France	906	800	1,706
Netherlands	798	687	1,485
Belgium	431	374	805
Austria-Hungary	343	393	736
Russia	334	278	612
Italy	330	260	590
Other countries	1,105	705	1,810

Commerce of Asia in 1900

Aggregate of Imports and Exports

$1,988,000,000

3

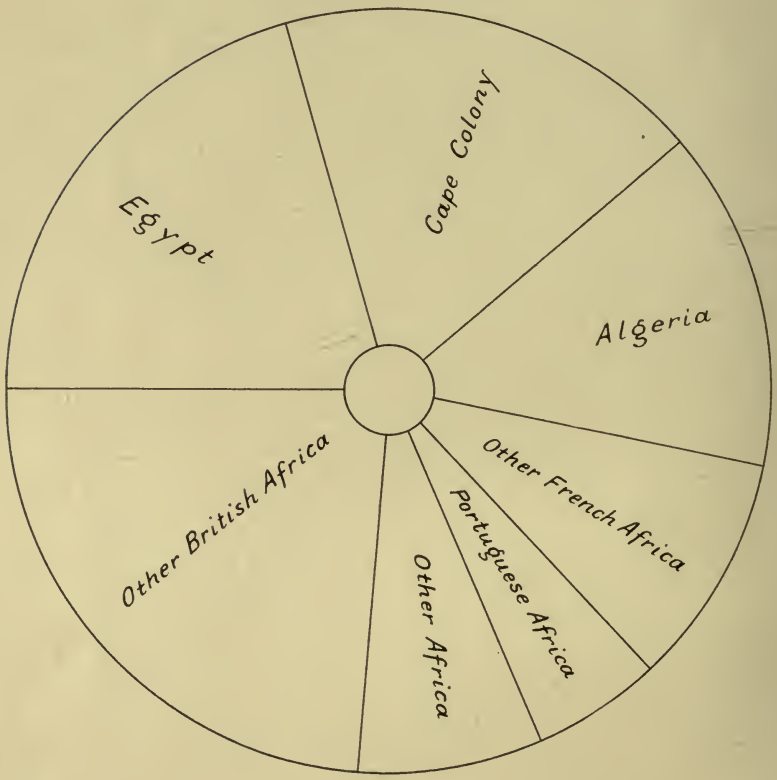
(Values given in Millions of Dollars.)

	Imports.	Exports.	Total.
India	342	395	737
Straits Settlements	152	127	279
China	156	111	267
Japan	150	100	250
Dutch East Indies	78	104	182
Ceylon	39	35	74
Other countries	101	98	199

Commerce of Africa in 1900

Aggregate of Imports and Exports

$738,000,000



4

(Values given in Millions of Dollars.)

	Imports.	Exports.	Total.
Egypt	70	83	153
Cape Colony	95	39	134
Other British Africa	126	52	178
Algeria	60	44	104
Other French Africa	43	29	72
Portuguese Africa	25	17	42
Other Africa	29	26	55

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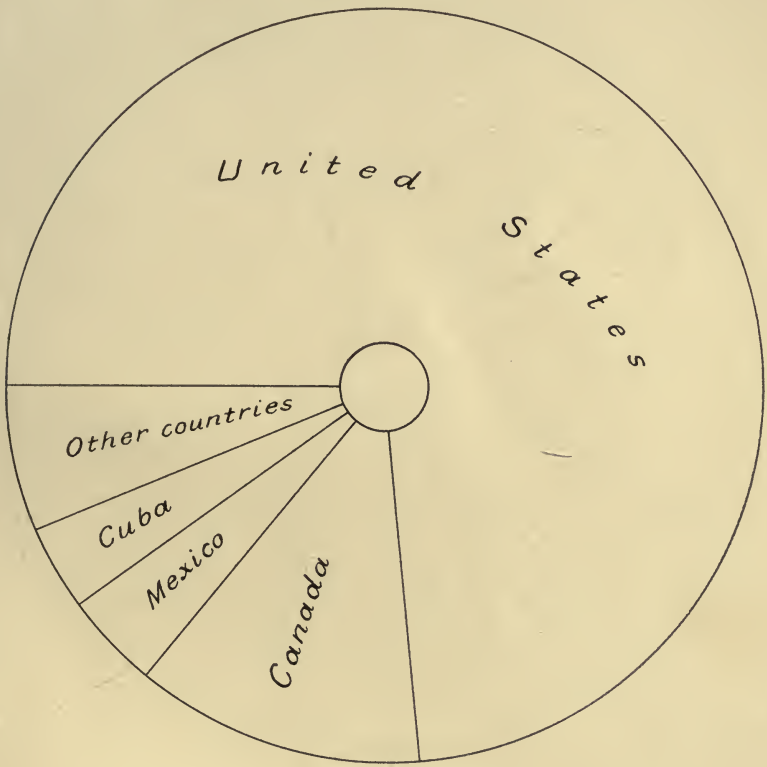
Commerce of North America in 1900

Aggregate of Imports and Exports

$3,101,000,000



5

(Values given in Millions of Dollars.)

	Imports.	Exports.	Total.
United States	829	1,453	2,282
Canada	180	196	376
Mexico	61	70	131
Cuba	66	49	115
Other countries	105	92	197

Commerce of South America in 1900

Aggregate of Imports and Exports

$821,000,000

(Values given in Millions of Dollars.)

	Imports.	Exports.	Total.
Argentine Republic	109	154	263
Brazil	84	162	246
Chile	47	61	108
Uruguay	23	29	52
Peru	11	21	32
Other countries	50	70	120

Commerce of Oceania in 1900

Aggregate of Imports and Exports

$902,000,000

(Values given in Millions of Dollars.)

	Imports.	Exports.	Total.
Australia (including inter-state trade)	337	354	691
New Zealand	52	64	116
Hawaii	19	22	41
Philippine Islands	20	20	40
Other Oceania	6	8	14

Commerce of United Kingdom in 1901

Imports by Countries

$2,540,000,000

8

(Values given in Millions of Dollars.)

United States	686.3	Denmark	70.3
France	249.2	Spain	68.3
Netherlands	159.9	Argentine Republic	60.4
Germany	156.7	Egypt	57.9
British India	133.3	New Zealand	51.6
Belgium	120.0	Sweden	47.6
Australia	117.9	Straits Settlements	29.7
Russia	106.6	Norway	27.1
Canada	96.6	All other countries	300.6

Commerce of Germany in 1900

Imports by Countries

$1,372,000,000

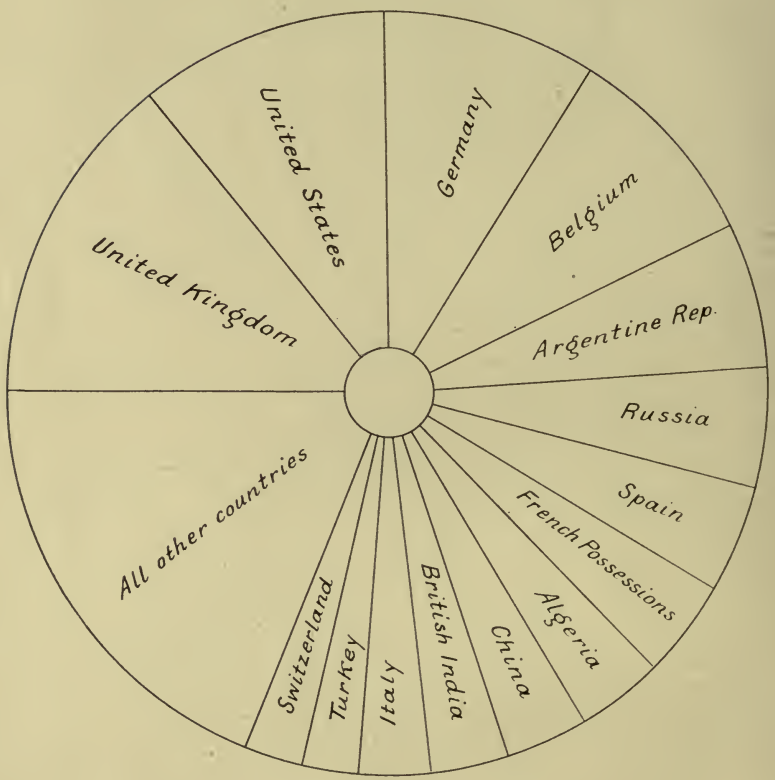
(Values given in Millions of Dollars.)

United States	238.8	Holland	49.7
United Kingdom	171.0	Italy	43.0
Austria-Hungary	167.6	Switzerland	38.7
Russia	162.6	Australia and New Zealand	27.9
France	72.0	Brazil	26.8
Argentine Republic	55.3	Sweden	24.8
British East Indies	53.4	All other countries	189.2
Belgium	51.2		

Commerce of France in 1900

Imports by Countries

$906,000,000



10

(Values given in Millions of Dollars.)

United Kingdom	130.0	Algeria	32.0
United States	98.3	China	31.0
Germany	82.4	British India	29.7
Belgium	81.4	Italy	28.6
Argentine Republic	54.9	Turkey	20.8
Russia	44.6	Switzerland	20.6
Spain	42.4	All other countries	171.2
French Possessions	38.1		

Commerce of China in 1900

Imports by Countries

$156,000,000

11

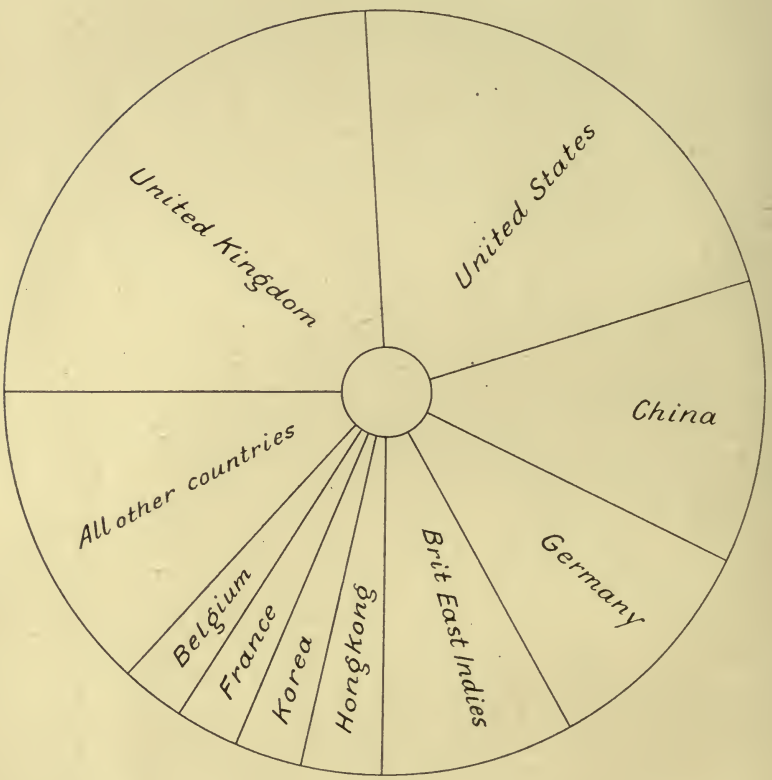
(Values given in Millions of Dollars.)

Hongkong	65.9	United States	11.7
United Kingdom	31.9	Russia (Europe)	2.9
Japan	18.0	All other countries	13.8
India	11.8		

Commerce of Japan in 1900

Imports by Countries

$150,000,000



12

(Values given in Millions of Dollars.)

United Kingdom	36.3	Hongkong	5.6
United States	32.0	Korea	4.3
China	17.9	France	4.0
Germany	14.5	Belgium	3.9
British East Indies	11.9	All other countries	19.6

Commerce of Cape Colony in 1900

Imports by Countries

$95,000 000

(Values given in Millions of Dollars.)

United Kingdom	63
Australia	9
United States	8
All other countries	15

Commerce of Egypt in 1900

Imports by Countries

$69,700,000

(Values given in Millious of Dollars.)

United Kingdom	27.0	Austria-Hungary	4.4
Turkey	10.9	British East Indies	3.4
France and Algeria	6.4	All other countries	17.6

Commerce of Canada in 1900

Imports by Countries

$180,700,000

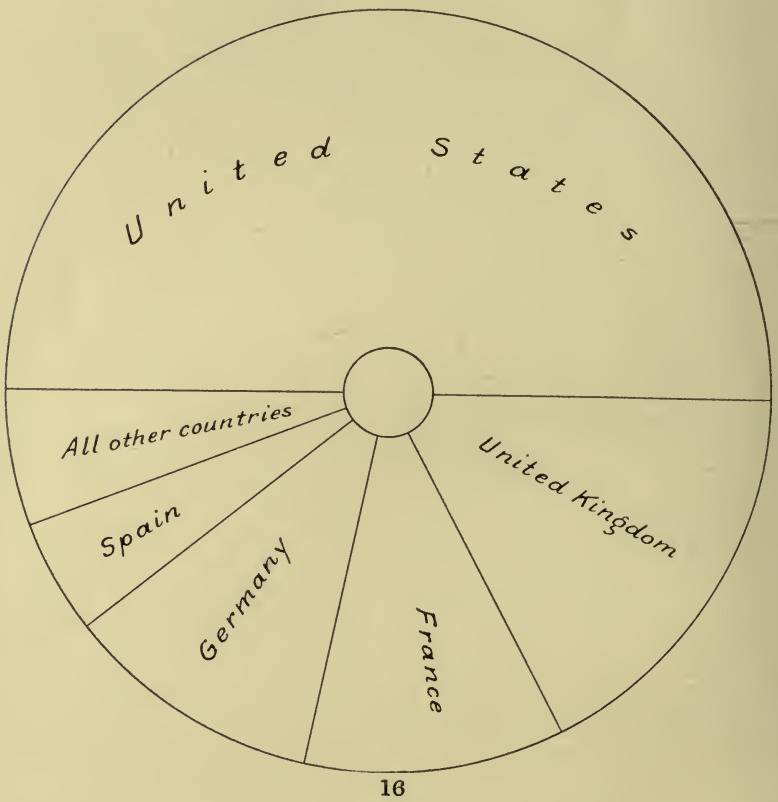
(Values given in Millions of Dollars.)

United States	109.8
United Kingdom	44.8
Germany	8.3
All other countries	27.8

Commerce of Mexico in 1900

Imports by Countries

$61,000,000



(Values given in Millions of Dollars.)

United States	31.0
United Kingdom	10.4
France	6.7
Germany	6.6
Spain	2.9
All other countries	3.4

Commerce of Argentina in 1900

Imports by Countries

$109,500,000

(Values given in Millions of Dollars.)

United Kingdom	37.3	Belgium	8.1
Germany	16.0	Brazil	3.8
Italy	14.4	Spain	3.5
United States	12.9	All other countries	3.0
France	10.5		

Commerce of Chile in 1900

Imports by Countries

. $47,000,000

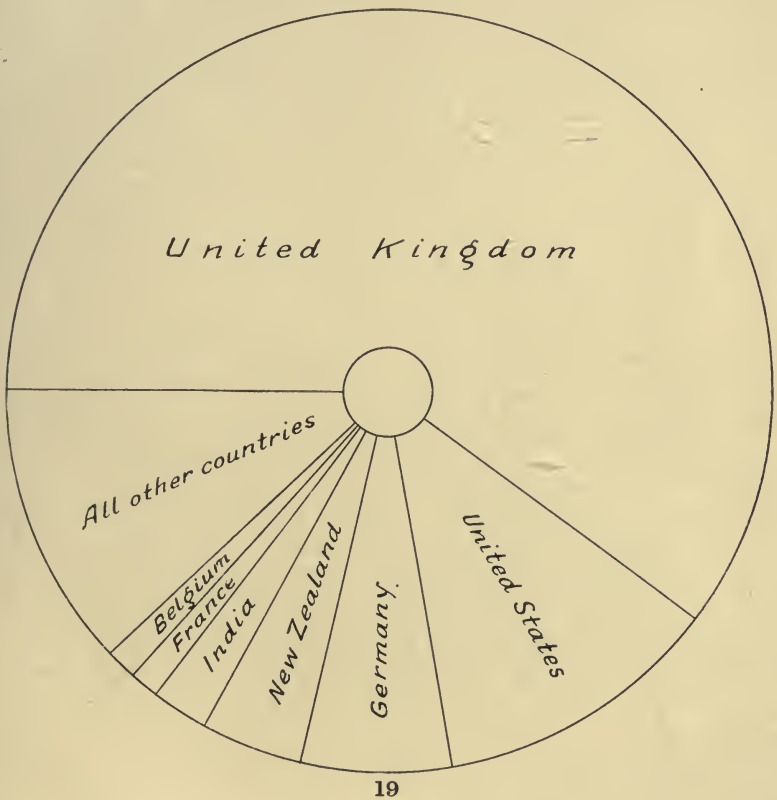
(Values given in Millions of Dollars.)

United Kingdom	15.4
Germany	12.5
United States	4.3
Australia	3.3
France	3.3
Peru	2.4
All other countries	5.8

Commerce of Australia in 1900

Imports by Countries, excluding Inter-State Trade

$206,400,000



(Values given in Millions of Dollars.)

United Kingdom	123.6
United States	24.3
Germany	13.2
New Zealand	9.2
India	5.2
France	2.7
Belgium	2.6
All other countries	25.6

Commerce of United States in 1901

Imports by Countries

$880,000,000

(Values given in Millions of Dollars.)

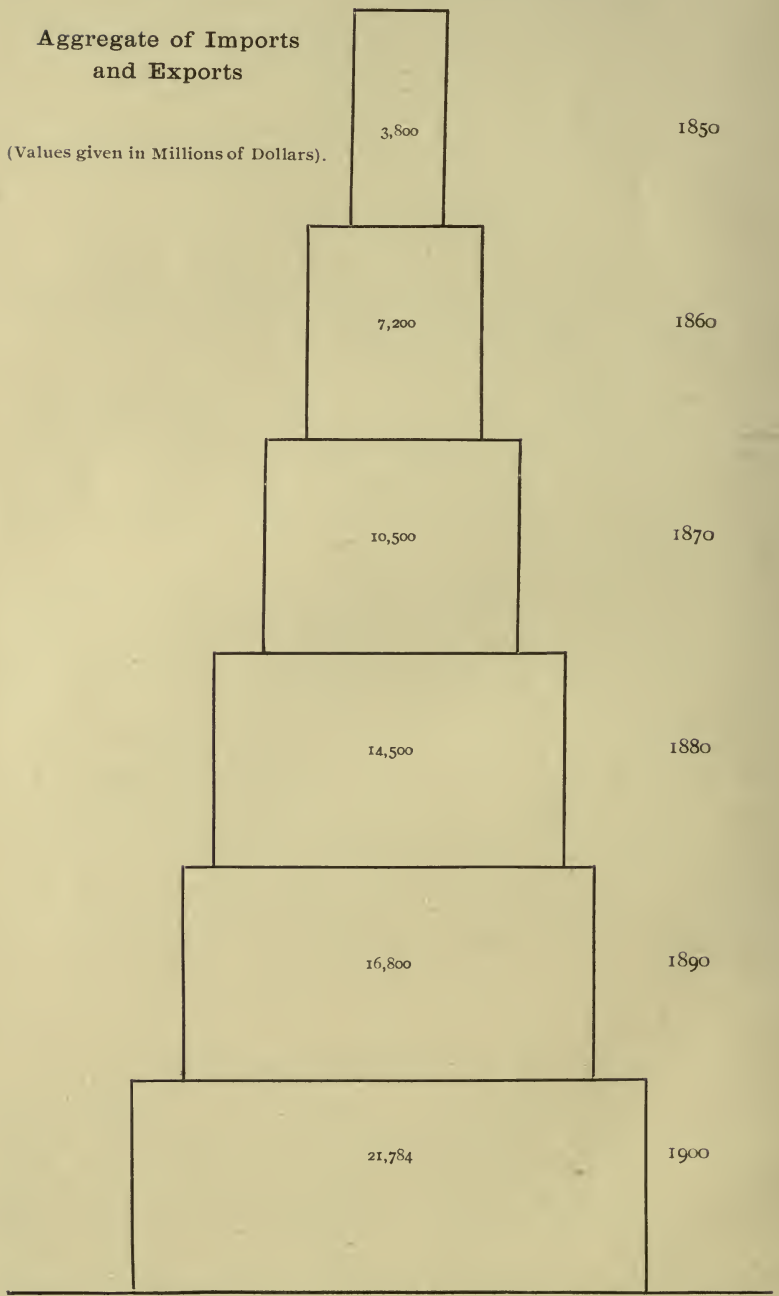
United Kingdom	155
Germany	99
France	81
Brazil	79
British India	47
Cuba	46
Canada	45
Japan	36
Mexico	35
Italy	27
Netherlands	21
Chinese Empire	18
Switzerland	16
Dutch East Indies	15
Belgium	14
British West Indies	12
Austria-Hungary	10
Argentine Republic	9
Chile	9
Egypt	8
Venezuela	7
Spain	7
All other countries	84

Chart 21 shows the progress of the world's commerce since 1850. It will be noticed that the largest percentage of increase, in any decade, was from 1850 to 1860.

Foreign commerce, as we consider it, was almost unknown a century and a half ago. In 1800, the world's commerce was about equal to that of the United States in 1880, and even in 1850, it was less than that of the United Kingdom in 1900. Since 1850 the world's commerce has increased so rapidly that it is now six times as large as it was then.

Charts 22, 23, and 24 show the progress of the United States, the United Kingdom, and Germany by decades; the latter only since 1870, because, prior to that, there was no German Empire, and the combined statistics of the various states are not available. It will be seen in chart 22 that the United States commerce has increased since 1850, until it is now seven times as great as it was then. The largest percentage of increase, for the United States, was in the decade from 1850 to 1860. In chart 23 it will be seen that the percentage of increase of the United Kingdom has been less than that of the other two nations, and it was largest from 1850 to 1860. Taking the period from 1870 to 1900 United States trade increased 173 per cent., German trade 144 per cent., and British trade 50 per cent.

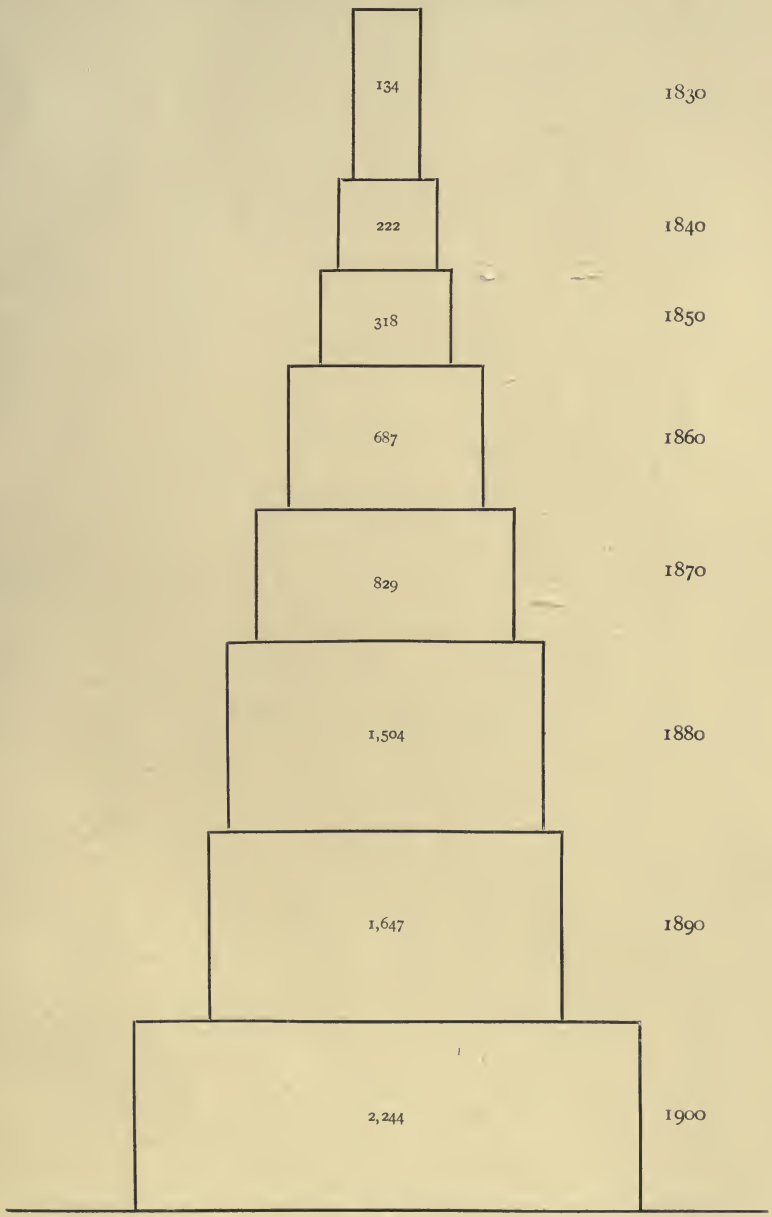
Commerce of the World since 1850



Commerce of the United States since 1830

Aggregate of imports and Exports

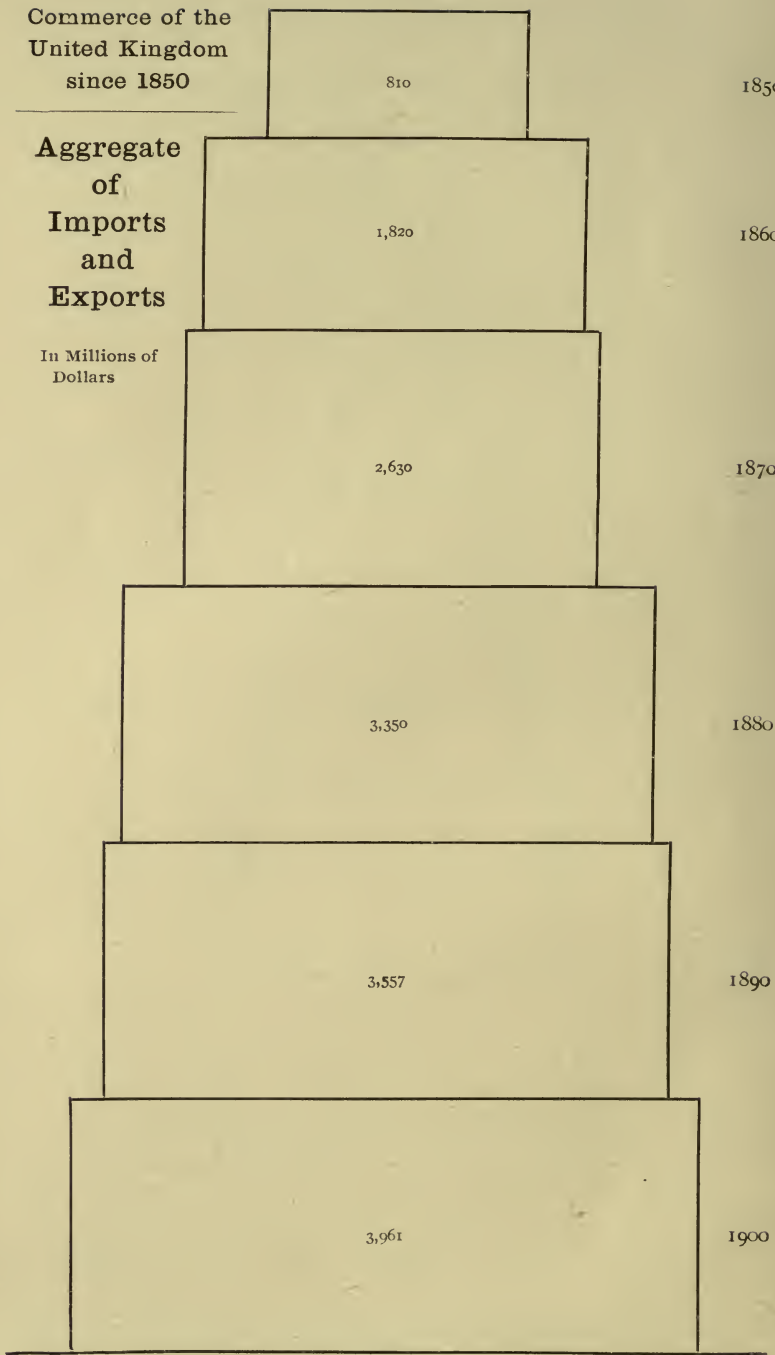
(Values given in Millions of Dollars.)



Commerce of the United Kingdom since 1850

Aggregate of Imports and Exports

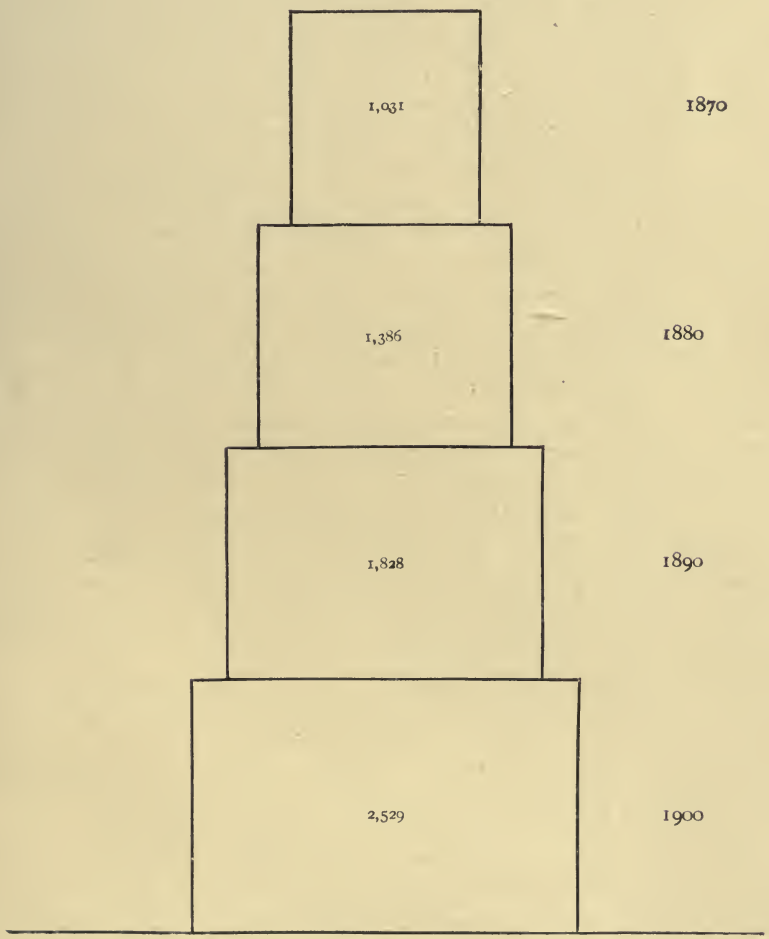
In Millions of Dollars



Commerce of Germany since 1870

Aggregate of Imports and Exports

(Values given in Millions of Dollars).

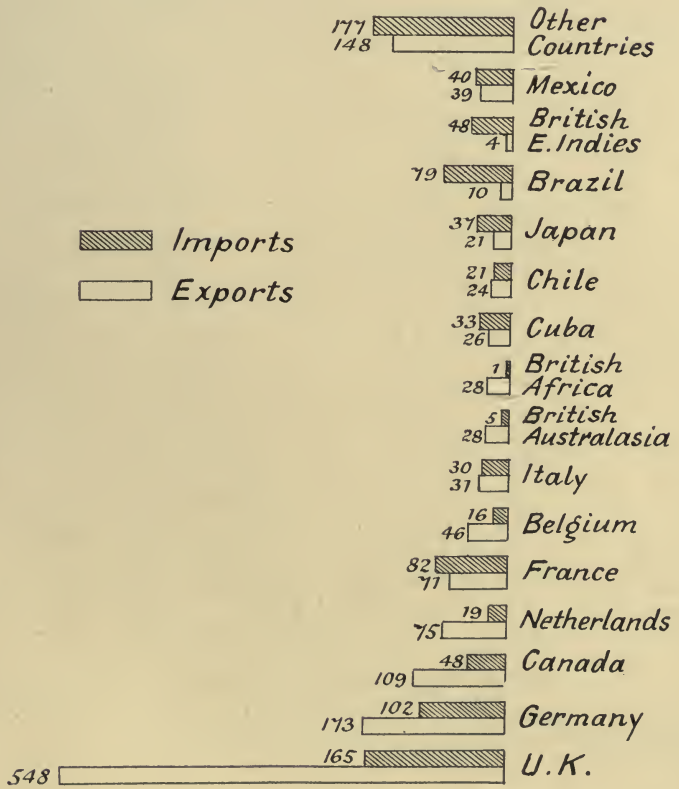


Charts 25, 26 and 27 are on the same scale, and give the imports and exports of the United States, United Kingdom, and Germany, by countries, so that the relative value of the imports and exports can be readily seen. In chart 26 it is shown that the United Kingdom buys more from the United States than from all its colonies. In chart 25 it is seen that our best customer is the United Kingdom, followed by Germany, Canada, and the Netherlands, and that we sell much more to these countries than they do to us, while the reverse is the case with France, Brazil, Japan, and Cuba. Chart 27 shows that Germany buys more from us than we buy from them. This is one of the causes of complaint in Germany against the United States tariffs, yet we can do better without the things Germany furnishes us than they can without the goods we furnish them. During the ten years from 1891 to 1901, the largest increase in the value of imports was: the United Kingdom, $421,000,000; Germany, $303,000,000; and Netherlands, $279,000,000. The largest increase in the value of exports was: the United States, $340,000,000; Germany, $299,000,000; the United Kingdom, $274,000,000; and the Netherlands, $236,000,000. The largest *percentage* of increase was in the less developed regions. Cape Colony, Argentina, Egypt, and Russia have the largest percentage of increase in the value of imports, while Japan, Canada, Mexico, and Argentina have the largest percentage of increase in the value of exports.

Commerce of the United States in 1902, for fiscal year ending June 30.

Imports and Exports by Countries.

(Values given in Millions of Dollars.)



Commerce of the United Kingdom in 1901

Imports and Exports by Countries

(Values given in Millions of Dollars.)

Commerce of Germany in 1900.

Imports and Exports by Countries

(Values given in Millions of Dollars.)

Charts 28 and 29 are drawn on the same scale in order to show the comparative value of the products of the farm and the factory. In 1900, the value of farm products was 142 per cent. greater than in 1870, and the value of manufactured products was 207 per cent. greater. The value of the exports of agricultural products was 131 per cent. greater, and the value of the exports of manufactured products was 536 per cent. greater in 1900 than in 1870. In comparing the value of the exports of manufactured products with the total production, it is more correct to use the shaded blocks, as these include all items of export, which are considered manufactured products, in the census statistics. The shaded block, in 1900, shows that only about 6 per cent. of all our manufactured products are exported. Consumption, in this country, has grown almost as rapidly as production. This is largely due to high wages and the increased purchasing power arising therefrom. The necessity for foreign trade, however, is becoming yearly more apparent because of the rapid and enormous increase of the productive capacity of our manufacturing industries, which, in 1850, was only $40.93 per capita, but in 1900 was $170 42 per capita. There are no statistics available, for the year 1900, showing the manufactured products of the larger nations, but if we take estimates made for 1896 as a test, we find that the United States manufactured over twice as much as the United Kingdom, and more than France, Germany, Russia, and Austria combined. There is little doubt that the present amounts, if known, would make as favorable a showing for the United States. While it is true that in manufacturing we outrank other nations, when it comes to foreign commerce this is not the case. If we consider the per capita imports and exports of the leading nations, we will find that the United States does not hold as high a rank as many smaller nations. Our imports in 1901 amounted to $11.80 per capita, while those of the Netherlands amounted to $159.80; Belgium, $64.90; Switzerland, $61.00; United Kingdom, $61.00, and Australia, 55.00 per capita. In exports, the United States per capita, in 1901, was $17.80, while that of the Netherlands was $136.40; Australia, $65.30; Belgium, $53.40, and Switzerland, $48.90. The nations having the lowest per capita of imports and exports in 1901 were:

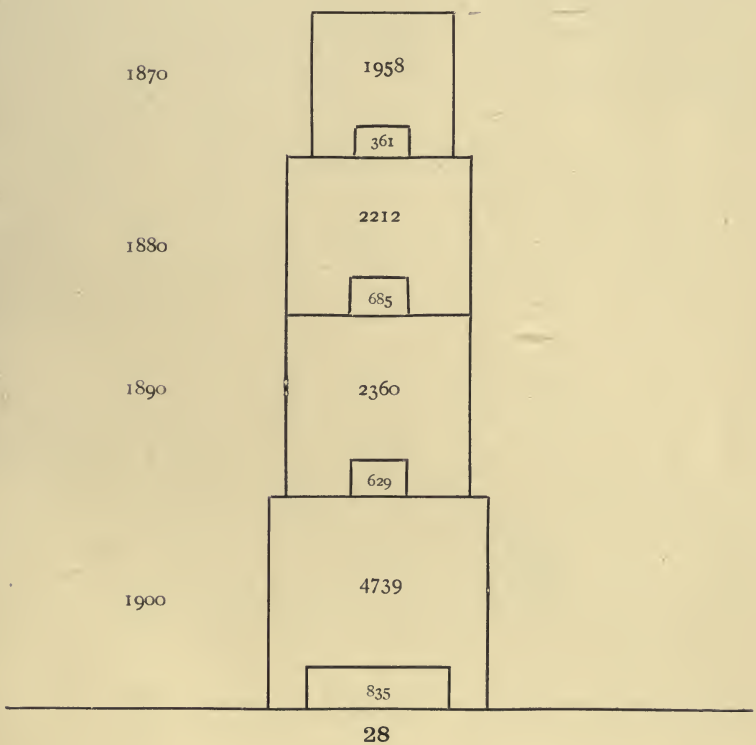
China	Imports,	$0.50	per capita.	Exports,	$0.31	per capita.
India	"	.80	"	"	1.30	"
Japan	"	2.90	"	"	2.80	"
Russia	"	3.00	"	"	3.40	"
Mexico	"	4.70	"	"	5.70	"

United States Production and Export

In Census Years

Farm Products and Agricultural Exports.

Values given in Millions of Dollars



The larger blocks represent farm products and the smaller agricultural exports.

United States Production and Export—In Census Years

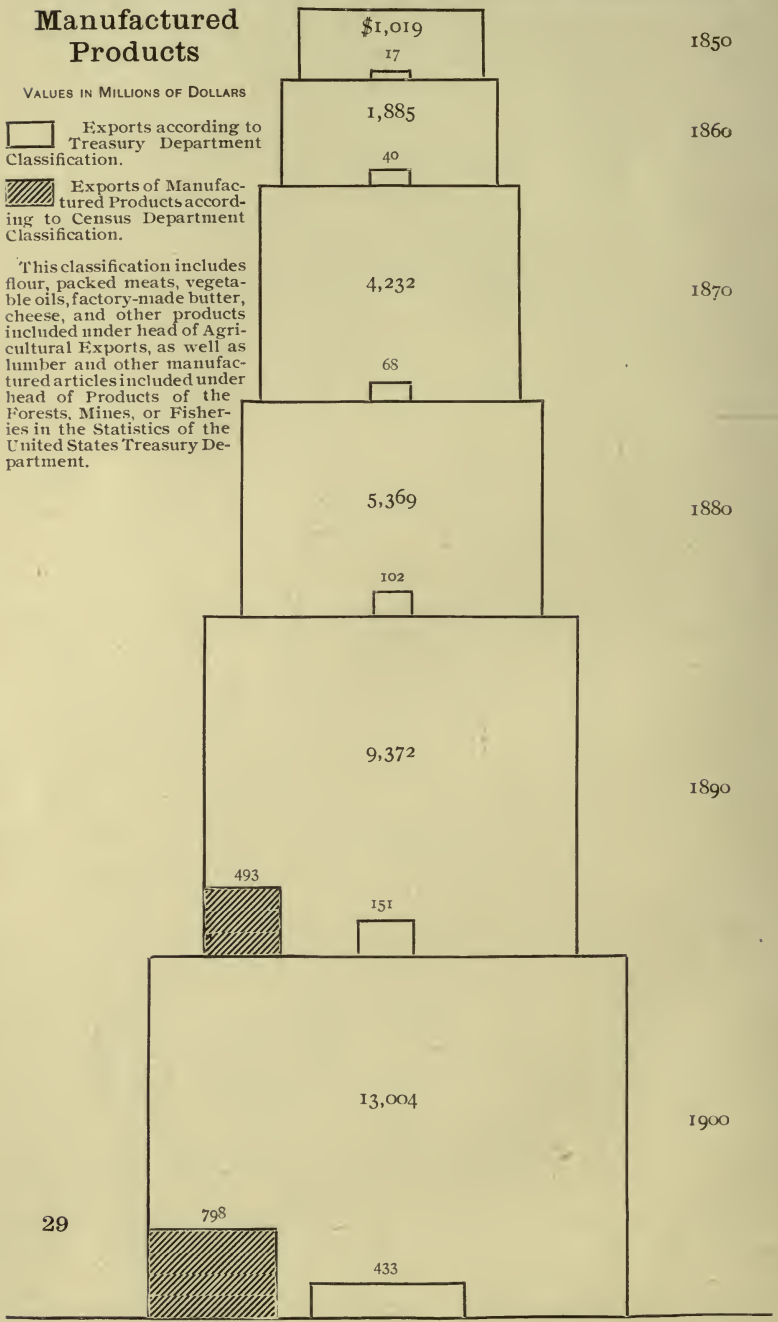


Chart 30 groups United States agricultural exports according to the sources of production, while charts 31 and 32 show the destination of the exports of agricultural and manufactured products, by grand divisions.

Chart 33 shows the principal articles of domestic manufacture exported. While the United States leads in the export of domestic products, it is below the United Kingdom and Germany in the value of the exports of manufactured goods; but the increase in the exports of manufactured goods from the United States during the last ten years has been greater, both in amount and percentage, than that of its three largest competitors—the United Kingdom, Germany, and France.

Charts 34–84 illustrate the production and exports of the manufactured products of the United States.

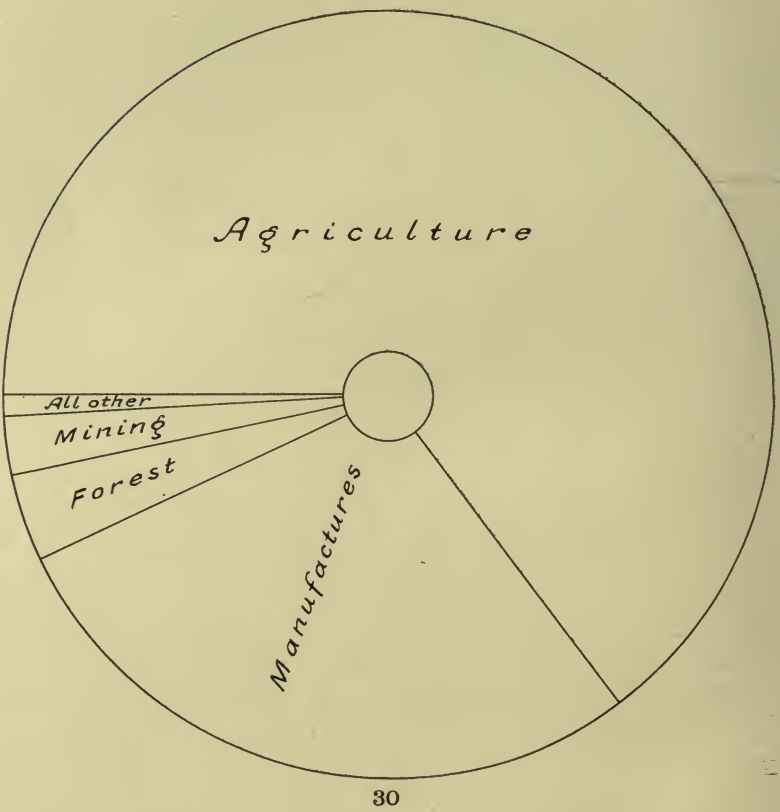
Chart 34 gives the comparative value of the leading classes of manufactured products according to the census of 1900. Food and kindred products lead, in the value of the output, in the census year, followed by iron and steel and their products, and by textiles. Hand trades come next, followed by lumber and its manufactures.

United States Exports in 1901

Fiscal Year ending June 30

Grouped according to Sources of Production

$1,460,400,000



30

(Values given in Millions of Dollars.)

Agriculture	943.8
Manufactures	412 2
Forest	54·3
Mining	37·9
All other exports	12.2

United States Exports in 1901

Fiscal Year ending June 30

Agricultural Products. By Grand Divisions

$943,800,000

31

(Values given in Millions of Dollars.)

Europe	843.7
North America	58.3
South America	11.3
Asia	13.9
Africa	13.1
Oceania	3.5

United States Exports in 1901

Fiscal Year ending June 30

Manufactured Products. By Grand Divisions

$412,000,000

(Values given in Millions of Dollars.)

Europe	215.5
North America	96.1
Asia	33.8
Oceania	29.0
South America	27.1
Africa	10.5

United States Exports in 1901

Fiscal Year ending June 30

Manufactured Products. By Articles

$412,000,000

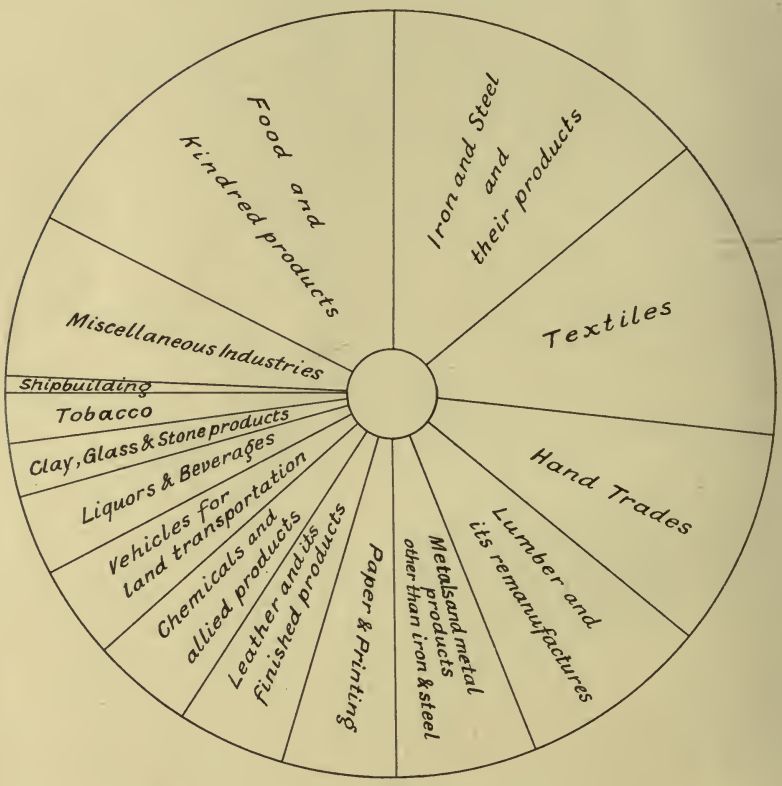
(Values given in Millions of Dollars.)

Iron and steel and mfrs. of	117.3	Fibers, manufactures of	4.3
Oils, mineral, refined	64.4	Carriages, cars, and parts of	4.2
Copper, manufactures of	43.0	Cars, passenger and freight, for steam railroads	4.1
Leather and manufactures of	27.9	India rubber and gutta percha, manufactures of	3.6
Cotton, manufactures of	20.0	Books, maps, engravings, and other printed matter	3.4
Agricultural implements	16.3	Spirits, distilled	3.0
Chemicals, drugs, dyes, and medicines	14.3	Musical instruments	2.7
Wood, manufactures of	11.0	Cycles and parts of	2.5
Paper and manufactures of	7.4	Clocks, watches, and parts of	2.3
Instruments, etc. for scientific purposes	7.3	Glass and glassware	2.1
Paraffin and paraffin wax	6.8	All other articles	39.1
Tobacco, manufactures of	5.0		

United States Manufactures in 1900

Value of Production by Leading Classes

$13,004,400,000



34

(Values given in Millions of Dollars.)

Food and kindred products	2,278	Leather and its finished products,	584
Iron and steel and their products,	1,793	Chemicals and allied products	553
Textiles	1,637	Vehicles for land transportation,	509
Hand trades	1,184	Liquors and beverages	426
Lumber and its manufactures	1,031	Clay, glass, and stone products	293
Metals and metal products, other than iron and steel	749	Tobacco	283
Paper and printing	606	Shipbuilding	74
		Miscellaneous industries	1,004

FOOD AND KINDRED PRODUCTS.

Chart 35—Slaughtering and meat packing, wholesale. This industry is found chiefly in Illinois (which manufactures three-eighths), Kansas, Nebraska, Missouri, and Indiana. Large cities have a greater percentage of this industry than is generally the case with manufactured products, Chicago alone having over one-third. This does not include Slaughtering, wholesale (not packing), which covers fresh meats; the value of fresh meat products in 1900 was $87,000,000.

Chart 36—Flouring and grist mill products. This is the second largest industry in this group, and is widely diffused, more than three-fourths being carried on outside of the large centers. Minneapolis, the largest flour manufacturing center, produces only about nine per cent. of the total output.

Chart 37—Sugar and molasses refining. This industry is carried on chiefly at ports where the raw material, which is nearly all imported, can be readily obtained. It is the leading manufacturing industry of Boston, Brooklyn, New Orleans, and San Francisco, and the second of Philadelphia.

United States Manufactures in 1900

Slaughtering and Meat Packing, Wholesale

Value of products, $699,000,000

(Values given in Millions of Dollars.)

Chicago	248.8	New York	7.9
Kansas City, Kansas	73.2	Cleveland, Ohio	7.5
South Omaha, Nebraska	67.7	Milwaukee	5.9
St. Joseph, Missouri	19.0	Baltimore	5.3
Indianapolis	18.3	San Francisco	5.2
St. Louis	12.2	Philadelphia	5.1
Buffalo	9.6	Louisville	4.2
Cincinnati	9.5	All other cities and outside places,	199.6

United States Manufactures in 1900

Flouring and Grist Mill Products

Value of products, $560,700,000

36

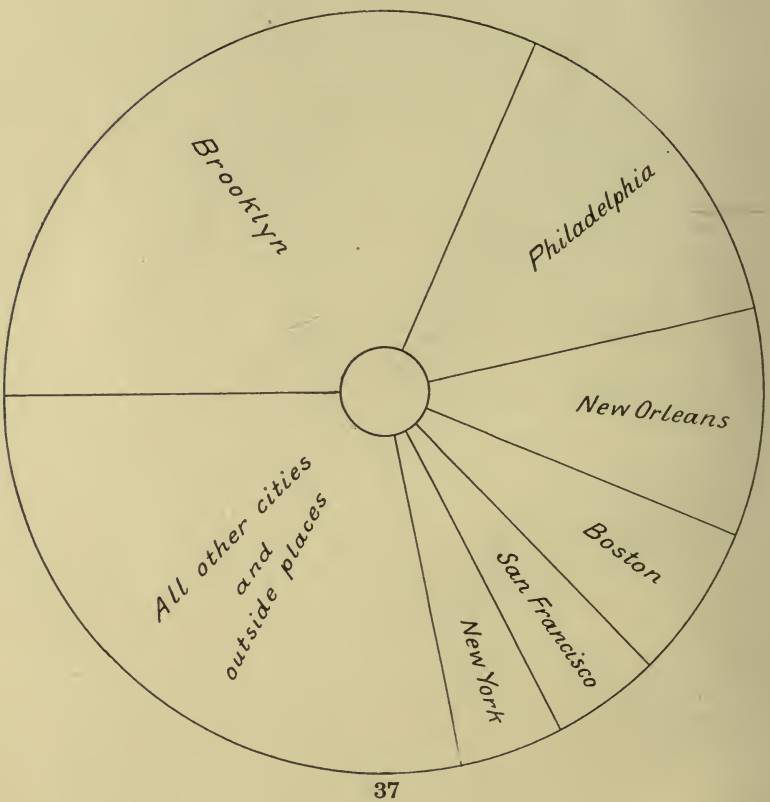
(Values given in Millions of Dollars.)

Minneapolis	49.6	Nashville	3.9
New York	8.8	Indianapolis	3.8
Milwaukee	6.3	San Francisco	3.5
Chicago	4.5	Buffalo	3.2
Toledo	4.4	Rochester	3.0
St. Louis	4.0	All other cities and outside places,	465.7

United States Manufactures in 1900

Sugar and Molasses Refining

Value of products, $240,000,000



(Values given in Millions of Dollars.)

Brooklyn	78.0
Philadelphia	36.0
New Orleans	22.6
Boston	15.7
San Francisco	11.0
New York City—not including Brooklyn	10.5
All other cities and outside places	66.2

IRON AND STEEL AND THEIR PRODUCTS.

Chart 38—Iron and steel. This is the leading industry in this group, and includes the products of blast furnaces, rolling mills, steel works, iron ore forges and bloomeries. Pittsburg is the leading center in this industry. Pennsylvania produced more than 54 per cent. of the total product of this class, Illinois, Ohio, and Alabama following in the order of value.

Chart 39—Foundry and machine shop products. This is second in importance of the iron and steel industries. It is more widely diffused than the manufacture of iron and steel, and is found, to some extent, in every large city, and wherever machinery is needed for any purpose. Chicago leads, followed by New York and Philadelphia.

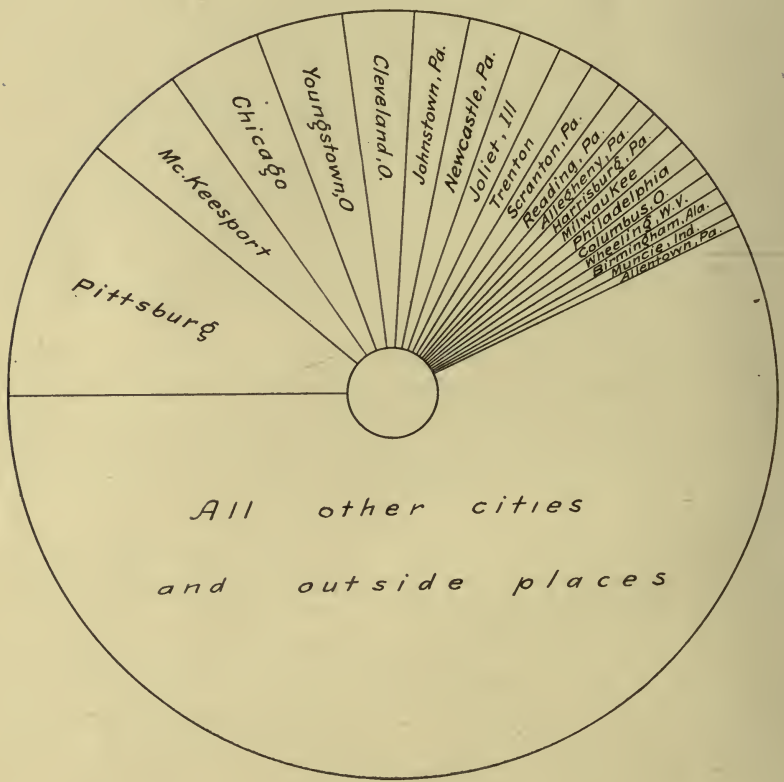
Chart 40. Hardware is one of the most important of the remaining iron industries. In this a number of New England towns rank high, New Britain being first.

Chart 41 gives the exports of hardware, and, as will be seen in most of the export charts, the United Kingdom leads. The total exports of all iron and steel and their products, as can be seen from chart 33, was $117,000,000, or more than one-fourth of all the manufactured products exported.

United States Manufactures in 1900

Iron and Steel

Value of products, $804,000,000



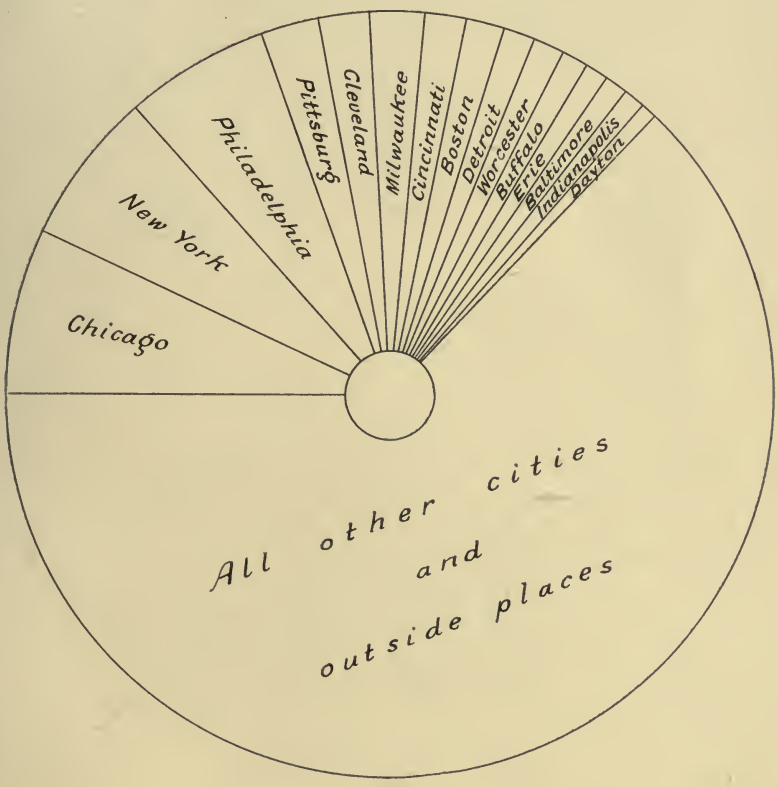
(Values given in Millions of Dollars.)

Pittsburg	90.7
McKeesport	34.3
Chicago	31.6
Youngstown, O.	28.2
Cleveland	24.2
Johnstown, Pa.	17.8
Newcastle, Pa.	15.1
Joliet, Ill.	13.3
Trenton	13.2
Scranton, Pa.	10.2
Reading	9.5
Allegheny, Pa.	7.9
Harrisburg, Pa.	7.6
Milwaukee	7.4
Philadelphia	7.2
Columbus, O.	5.9
Wheeling, W. Va.	5.8
Birmingham, Ala.	5.4
Muncie, Ind.	4.4
Allentown, Pa.	4.4
All other cities	459.9

United States Manufactures in 1900

Foundry and Machine Shop Products

Value of products, $644,000,000



39

(Values given in Millions of Dollars.)

Chicago	44.5	Detroit	8.9
New York	41.0	Worcester	8.5
Philadelphia	38.3	Buffalo	6.8
Pittsburg	15.5	Erie	6.5
Cleveland	15.4	Baltimore	6.1
Milwaukee	14.4	Indianapolis	5.7
Cincinnati	11.7	Dayton	4.9
Boston	9.3	All other cities and outside places,	406.5

United States Manufactures in 1900

Hardware

Value of products, $35,800,000

40

(Values given in Millions of Dollars.)

New Britain	5.7	Newark	1.0
Chicago	2.4	St. Louis	.7
New Haven	2.2	Bridgeport	.6
Philadelphia	1.7	Cincinnati	.6
Cleveland	1.6	Buffalo	.4
Meriden	1.6	Allegheny	.3
Reading	1.6	All other cities and outside places	14.1
New York	1.3		

United States Exports in 1901

Builders' Hardware

$5,560,000

(Values given in Millions of Dollars).

United Kingdom	1.40	British Africa	0.13
British Australasia	.98	Netherlands	.11
Germany	.60	Norway and Sweden	.10
Canada	.45	Denmark	.10
Mexico	.24	Italy	.08
France	.23	Japan	.05
Cuba	.17	Chinese Empire	.05
Belgium	.17	All other countries	.70

The textile industries are second, among the leading classes of manufactured products, in the amount of capital invested, and third, in the value of their products.

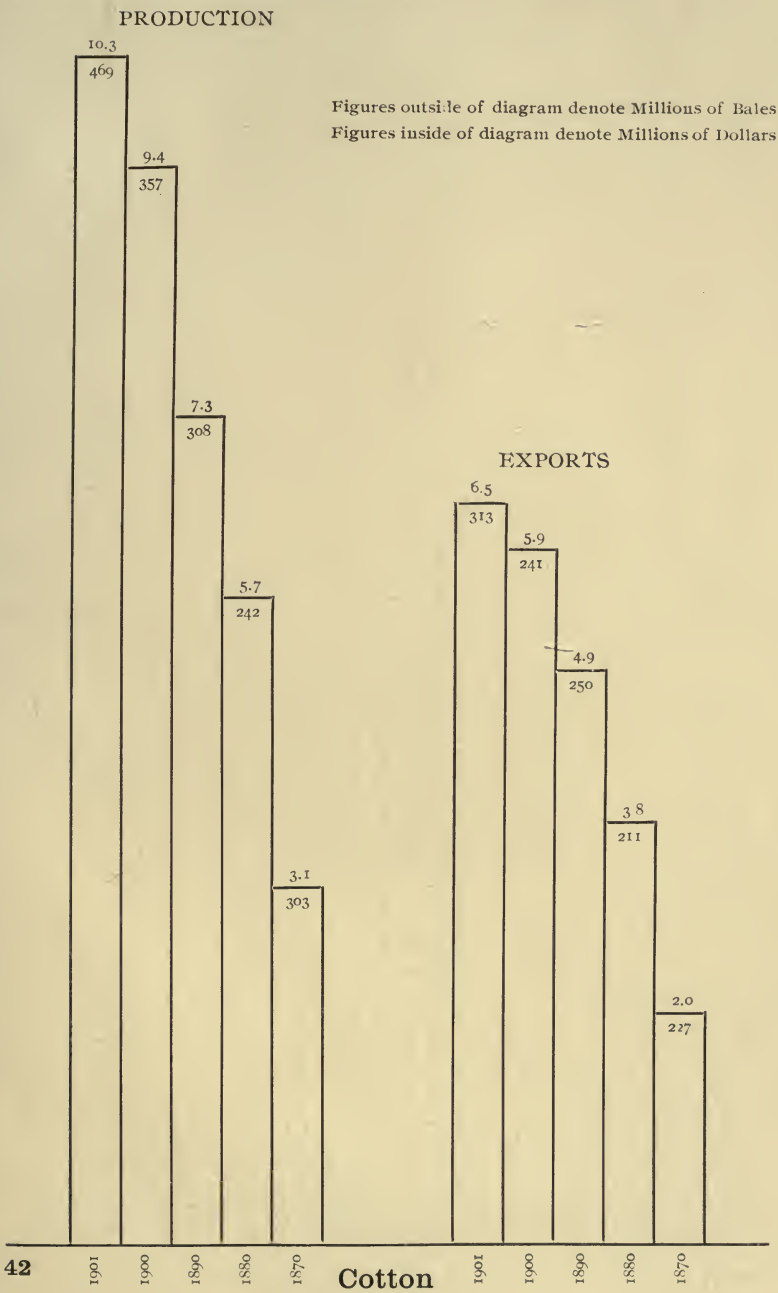
The leading textile industry is that of cotton manufacturing. Chart 42 shows the enormous increase in the quantity of cotton produced. The amounts inside the columns show that the value has not increased in the same ratio as the quantity. This is due to the decrease in the price of cotton per pound.

The development of the export trade in cotton, since 1870, has has been as great as that of production. Over one-third of the cotton crop is consumed in this country, less than one-third is sold to the United Kingdom, and about one-third to the rest of the world.

Chart 43 shows the great advance made in cotton manufactures in this country. In 1900 the United States factories consumed more than three times as much raw cotton as they did in 1870, and six times as much as in 1850. The value of cotton goods manufactured in the United States, as shown in the chart, has not increased in the same ratio. This is due to the reduction of the price per yard arising from the lower price of raw cotton and the lower cost of manufacture.

The United States consumes more cotton than any other nation. A large part of the goods manufactured in the United States are coarse or medium yarns, while in Europe finer yarns are in use; therefore, the value of our output is not as great as that of Great Britain. As the United States continues to increase the manufacture of its cotton into goods, and more especially into finer grades, which it is gradually doing, it will secure a large share of the profits now obtained by foreign countries from the manufacture of American cotton into cotton goods.

United States Production and Export



United States Production, Import and Export

Values given in Millions of Dollars

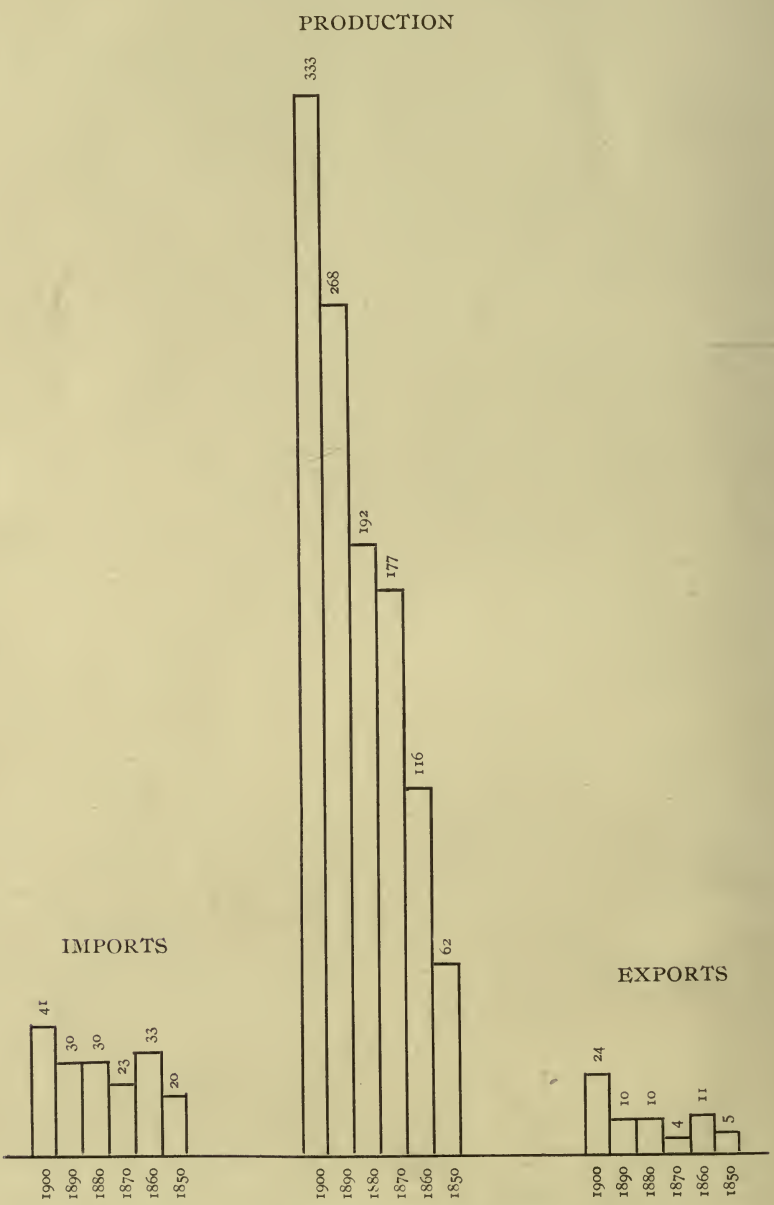


Chart 44 shows that Massachusetts produces more cotton goods than any other State, and also shows, what is not generally known, that South Carolina and North Carolina follow, in the order of the value of output of manufactured cotton goods.

Chart 45 gives the product by cities. Fall River is first, followed by Philadelphia; all the other cities, excepting Augusta, Georgia, which is the lowest given, are in the New England States.

The exports of cotton goods are given in charts 46 and 47. These show that China is the largest purchaser of United States cotton goods, followed by Aden and Latin American countries. Chart 48 shows that Great Britain and her Colonies buy most of the wearing apparel exported from the United States.

United States Manufactures in 1900

Cotton Manufactures. Giving Leading States.

Value of products, $339,000,000

44

(Values given in Millions of Dollars.)

Massachusetts	111.1	Georgia	18.5
South Carolina	29.7	Connecticut	15.5
North Carolina	28.4	Maine	14.6
Rhode Island	26.4	New York	10.8
Pennsylvania	25.4	All other States	35.7
New Hampshire	22.9		

United States Manufactures in 1900

Cotton Manufactures

Value of products, $339,000,000

(Values given in Millions of Dollars.)

Fall River	29.2	Lewiston, Me.	4.6
Philadelphia	17.6	Taunton, Mass.	4.6
Lowell	17.0	Warwick, R. I.	4.4
New Bedford	16.7	Holyoke, Mass.	3.7
Manchester, N. H	11.7	Augusta, Ga.	3 4
Lawrence, Mass	8.1	All other cities and outside places,	212.1
Pawtucket, R. I	5.6		

United States Exports in 1901

Cotton Cloth (uncolored)

$7,580,000

(Values given in Millions of Dollars.)

Chinese Empire 3.18	Cuba 10
Aden 95	British Australasia 09
Chile 56	British West Indies 09
United Kingdom 29	Peru 09
British Africa 24	Mexico 08
Venezuela 21	Honduras 08
Canada 20	Argentine Republic 07
British East Indies 20	Brazil 07
Salvador 12	All other countries 85
Colombia 11	

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United States Exports in 1901

Cotton Cloth (colored)

$6,550,000

47

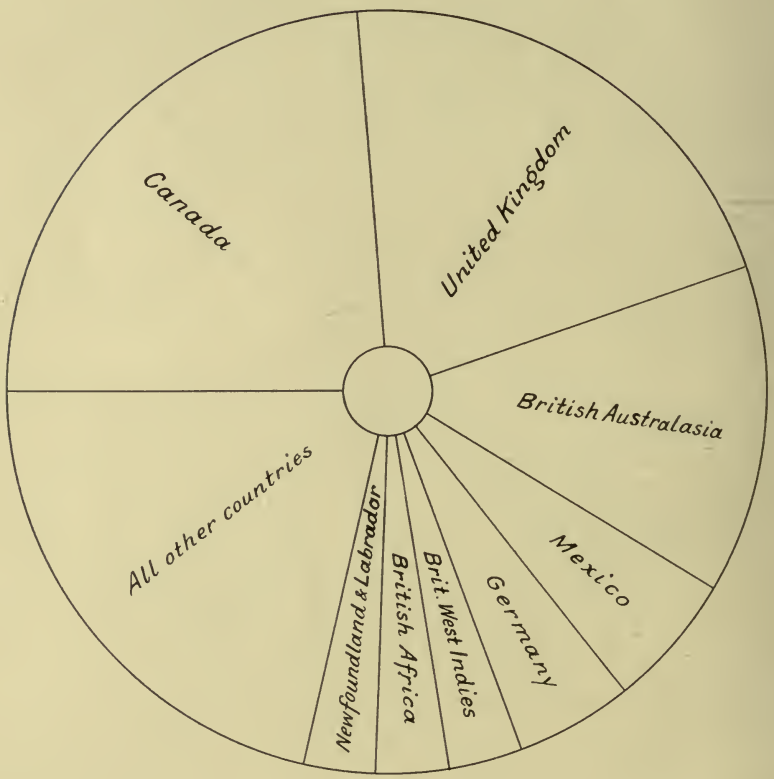
(Values given in Millions of Dollars.)

China	1.37	Santo Domingo	.20
Colombia	.72	Mexico	.17
Haiti	.68	Cuba	.14
Venezuela	.66	Costa Rica	.10
United Kingdom	.31	Guatemala	.09
British Australasia	.25	Dutch West Indies	.09
Brazil	.25	Honduras	.08
British West Indies	.25	Chile	.07
Canada	.24	Turkey in Europe	.07
British East Indies	.22	All other countries	.59

United States Exports in 1901

Wearing Apparel

$1,600,000



(Values given in Millions of Dollars.)

Canada	0 38	British West Indies	0.05
United Kingdom	.34	British Africa	.05
British Australasia	.22	Newfoundland and Labrador	.05
Mexico	.09	All other countries	.34
Germany	.08		

Chart 49 shows that the increase in the quantity of wool produced has not been as great as that of cotton. It also shows the fluctuations in the import of wool, in some years equaling one-third, and in 1900 one-half the production. Chart 50 shows the development of the wool manufacturing industries, the value of which is now six times as much as it was in 1850. It also shows a falling off in the import of woolen goods since 1890.

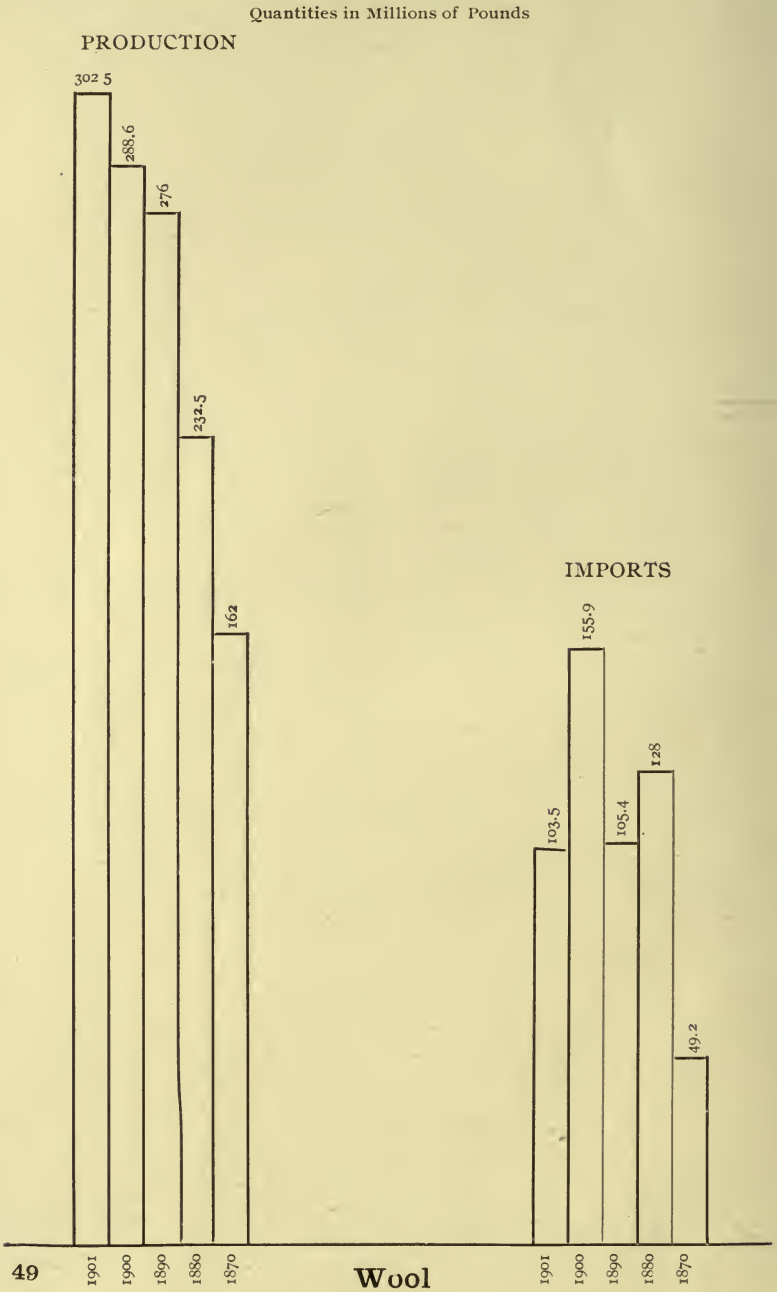
Chart 51—Woolen goods. In this Philadelphia leads with nearly one-sixth of the total production.

Chart 52—Worsted goods. Lawrence, Mass., leads, followed by Providence and Philadelphia.

The census of 1900 shows a falling off in the manufacture of woolens proper, and a marked increase in that of worsted goods. Some of the larger worsted mills in this country have a greater output than any foreign mill.

Chart 53—Carpets and rugs. The United States is the greatest carpet manufacturing nation in the world. It produced nearly 80,000,000 square yards of carpets in 1900, of which quantity Philadelphia alone manufactured over 40 per cent.

United States' Production and Imports



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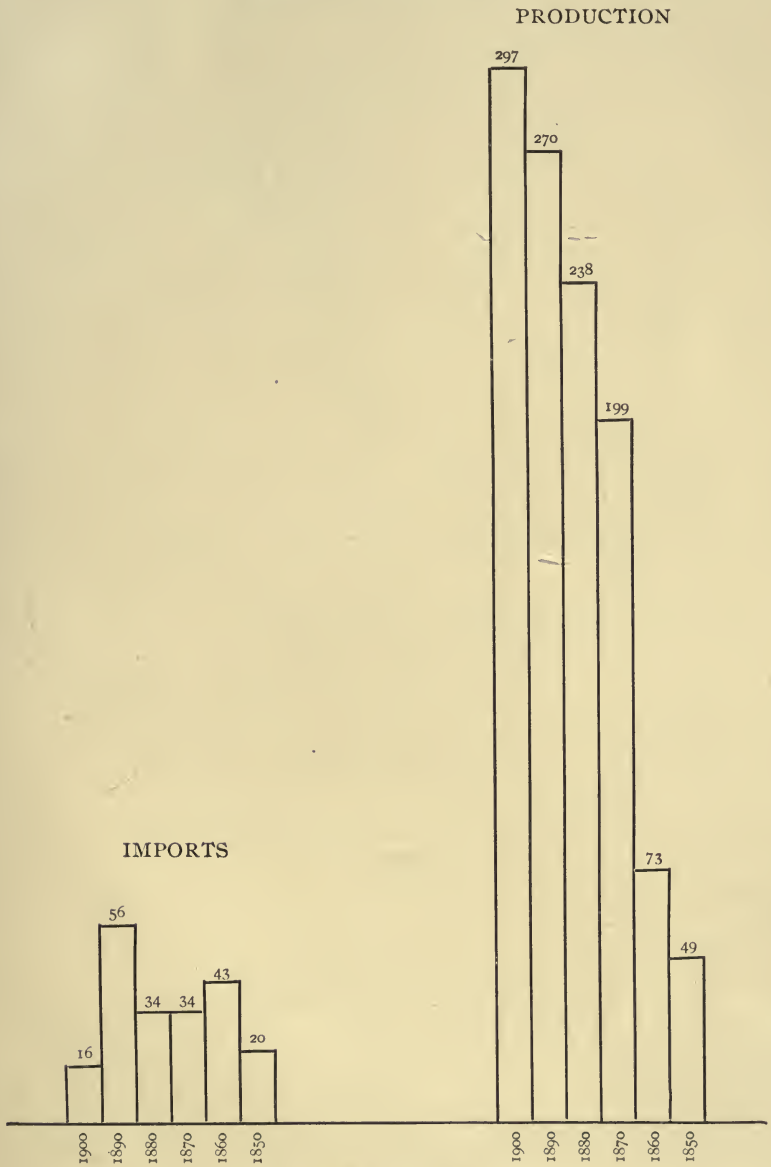
United States' Production and Imports

Values given in Millions of Dollars



United States Manufactures in 1900

Woolen Goods

Value of products, $118,000,000

51

(Values given in Millions of Dollars.)

Philadelphia	18.3
Lowell	3.2
Providence, R. I.	1.7
Worcester, Mass.	1.5
Pittsfield, "	1.5
Holyoke	1.4
New York	1.1
All other cities and outside places	89.3

United States Manufactures in 1900

Worsted Goods

Value of products, $120,000,000

52

(Values given in Millions of Dollars.)

Lawrence, Mass.	24.6
Providence, R. I.	16.6
Philadelphia	16.2
Pawtucket, R. I.	3.7
Woonsocket, "	2.7
Jamestown, N. Y.	2.5
Camden, N. J.	2.0
Lowell	1.4
All other cities and outside places	50.3

United States Manufactures in 1900

Carpets and Rugs, other than Rag

Value of products, $48,000,000

(Values given in Millions of Dollars.)

Philadelphia	21.0
Amsterdam, N. Y.	3.4
New York	2.4
All other cities and outside places	21.2

Chart 54—Hosiery and Knit goods. These were formerly classified with woolen goods, but now more cotton than wool is used in their manufacture. More machine knit goods, both underwear and hosiery, are turned out in the United States than in any other country in the world. Philadelphia leads in this industry, followed by Cohoes, where knitting machines were first used. The industry is carried on chiefly in New York and Pennsylvania.

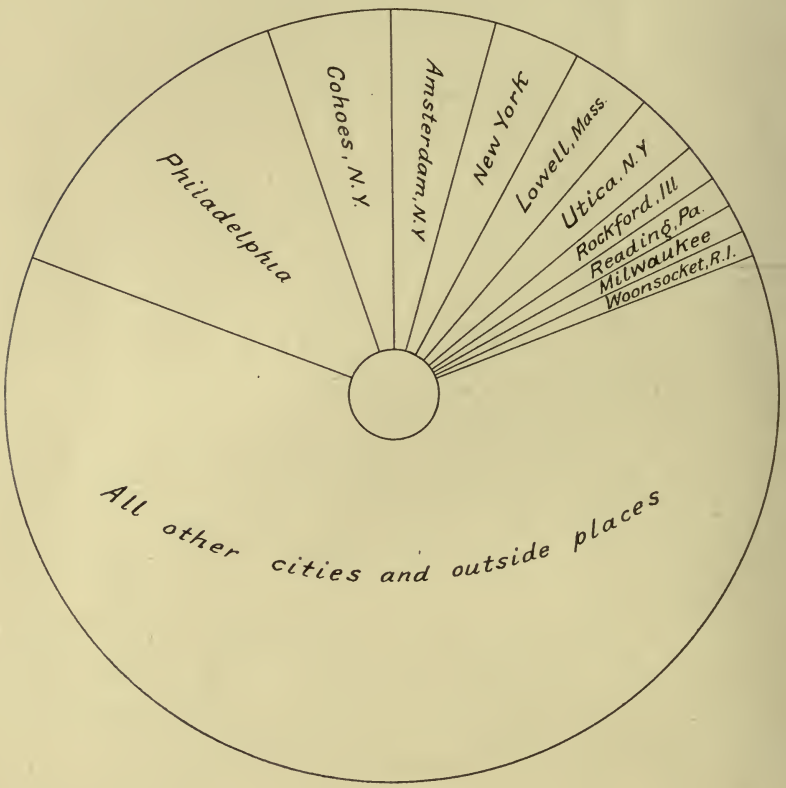
Chart 55—Cordage and Twine. These products are made out of cotton, flax, hemp (mainly Manila and sisal), and jute. The chief products are binder twine, made mainly out of sisal; sisal and Manila rope; and gunny bagging made out of jute. As most of the materials are imported, the industry is carried on largely at the chief sea ports.

Chart 56—Collars and Cuffs. This industry is almost entirely confined to the city of Troy. It is largely a home industry. There is hardly a town, within thirty miles of Troy, in which the female population is not engaged in some part of the collar and cuff business. Troy produces 86 per cent. of these products.

United States Manufactures in 1900

Hosiery and Knit Goods

Value of products, $95,000,000



(Values given in Millions of Dollars.)

Philadelphia	13.0
Cohoes, N. Y.	5.0
Amsterdam, N. Y.	4.2
New York	3.4
Lowell, Mass.	3.1
Utica, N. Y.	2.5
Rockford, Ill.	1.5
Reading, Pa.	1.3
Milwaukee	1.2
Woonsocket, R. I.	1.0
All other cities and outside places	58.8

United States Manufactures in 1900

Cordage and Twine

Value of products, $38,000,000

(Values given in Millions of Dollars.)

New York	8.7
Philadelphia	5.2
All other cities and outside places	24.1

United States Manufactures in 1900

Collars and Cuffs

Value of products, $15,500,000

56

(Values given in Millions of Dollars.)

Troy	13.4
Glens Falls, N. Y.	.7
Albany	.6
New York	.2
All other cities and outside places	.6

Chart 57 shows the wonderful development of the silk industry. Although all the raw material is imported, the United States has, in 50 years, become the chief silk manufacturing nation of the world, with the possible exception of France, the value, but not the quantity of whose products in this industry, may slightly exceed that of the United States.

Chart 58—Silk and Silk Goods. Paterson, N. J., is the leading city in this industry, producing about one-fourth of the output. The bulk of the silk manufacturing industry is in New Jersey and Pennsylvania. Plain and fancy silks, $39,000,000, constitute the largest item of the silk output, followed by ribbons, $18,000,000, and sewing silk and machine twist $9,000,000.

Chart 59—Dyeing and Finishing Textiles. This industry is carried on in independent establishments, as well as in connection with textile factories. It is natural that the three leading textile cities—Philadelphia, Paterson, and Fall River—should lead in the dyeing and finishing textile industry.

United States' Production and Imports

57

Silk Manufactures

United States Manufactures in 1900

Silk and Silk Goods

Value of products, $107,000,000

58

(Values given in Millions of Dollars.)

Paterson	26.0
New York	9.5
Philadelphia	4.5
W. Hoboken	3.9
Scranton	3.6
Allentown	3.4
All other cities and outside places	56.1

United States Manufactures in 1900

Dyeing and Finishing Textiles

Value of products, $44,000,000

59

(Values given in Millions of Dollars.)

Philadelphia	5.5
Paterson	3.8
Fall River	2.9
Passaic, N. J.	2.3
Providence	2.2
Pawtucket	1.6
New York	1.4
All other cities and outside places	24.3

The lumber industry is one of the four classes whose output was over a billion dollars in 1900.

Chart 60—Lumber and Timber Products. These include the logging industry, and the saw-mill industry, and are generally located in or near forest regions. The statistics can only be given by states. The three greatest lumber states are Wisconsin, Michigan and Minnesota followed by Pennsylvania. Seventy-five per cent. of the sawed lumber consists of pines, and 24.8 per cent. of hard woods: Southern yellow pine being 27.8 per cent. of all lumber, white pine 21.5 per cent., oak 12.8 per cent., and hemlock 9.8 per cent. The output is increasing in the Southern and Pacific States and decreasing in other sections.

Chart 61—Planing Mill Products. The distribution of this industry is influenced, not only by the presence of forests, but also by that of large bodies of population. The three leading states are New York, Wisconsin and Pennsylvania, and the leading cities are New York, Chicago and Philadelphia. The finished product of the saw-mill is the raw product of the planing mill.

Chart 62—Furniture. This industry, like that of the planing mill, is found near large centers of population. It will be seen that, with the exception of Grand Rapids and Sheboygan, the largest furniture manufacturing centers are in the large cities of the United States.

Chart 63—Exports of Furniture. Over one-half of these are sent to Great Britain and her Colonies and one-fifth to Mexico and Cuba.

In 1901 the exports of timber amounted to nearly $10,000,000, the United Kingdom taking nearly one-half, followed by Germany and Canada. The exports of lumber and planing mill products amounted to about $20,000,000, the United Kingdom leading, with nearly one-fourth, followed by Canada, Argentina, Germany and the Netherlands. The total value of the exports of wood and manufactures of, in 1901, was $50,000,000.

United States Manufactures in 1900

Lumber and Timber Products

Value of products, $566,000,000

60

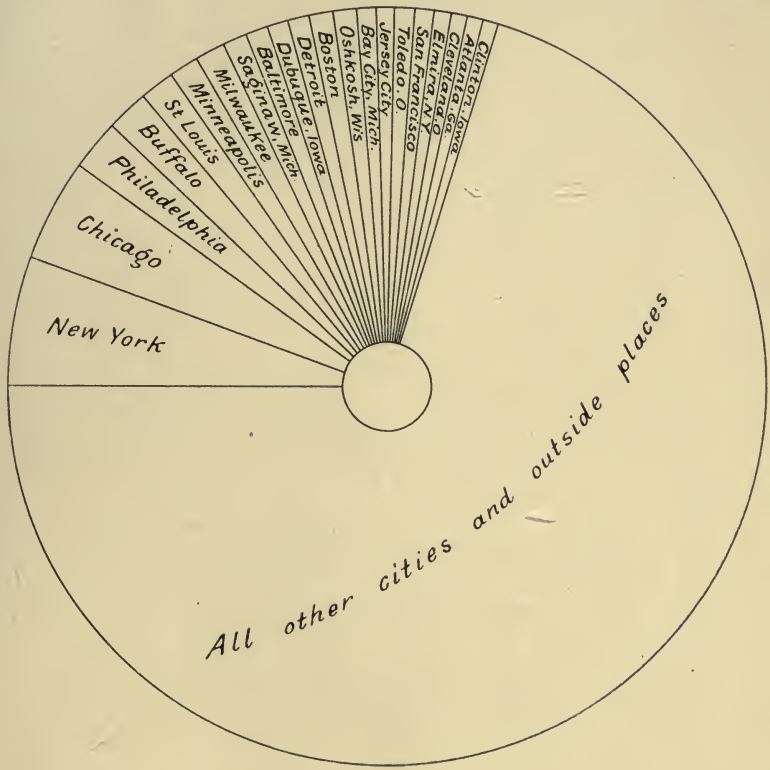
(Values given in Millions of Dollars.)

Wisconsin	57.6	New York	15.7
Michigan	54.0	Mississippi	15.6
Minnesota	43.5	North Carolina	14.8
Pennsylvania	35.7	Kentucky	13.7
Washington	30.0	California	13.7
Arkansas	23.9	Georgia	13.7
Ohio	20.7	Maine	13.4
Indiana	20.6	Alabama	12.8
Tennessee	18.0	Virginia	12.0
Louisiana	17.4	All other States	103.2
Texas	16.0		

United States Manufactures in 1900

Lumber, Planing Mill Products

Value of products, $168,000,000



(Values given in Millions of Dollars.)

New York	9.2	Boston	1.6
Chicago	7.5	Oshkosh, Wis.	1.6
Philadelphia	3.2	Bay City, Mich.	1.4
Buffalo	3.0	Jersey City	1.3
St. Louis, Mo.	2.3	Toledo, O.	1.3
Minneapolis	2.3	San Francisco	1.3
Milwaukee	2.1	Elmira, N. Y.	1.2
Saginaw, Mich.	1.8	Cleveland, O.	1.2
Baltimore	1.8	Atlanta, Ga.	1.1
Dubuque, Iowa	1.7	Clinton Iowa	1.0
Detroit	1.6	All other cities and outside places,	118.5

United States Manufactures in 1900

Furniture, Factory Product

Value of products, $125,000,000

(Values given in Millions of Dollars.)

New York	13.2	Rochester	2.0
Chicago	12.3	Detroit	1.8
Grand Rapids	7.4	Rockford, Ill.	1.8
Philadelphia	4.4	Indianapolis	1.6
Cincinnati	3.5	Buffalo	1.6
St. Louis	3.2	Jamestown, N. Y.	1.6
Sheboygan, Wis.	3.1	Milwaukee	1.4
Boston	2.8	Cleveland, O.	1.0
Baltimore	2.6	All other cities and outside places,	59.7

United States Exports in 1901

Furniture

$3,900,000

63

(Values given in Millions of Dollars.)

United Kingdom	1.08
Mexico	.46
Canada	.42
British Australasia	.35
British Africa	.35
Cuba	.33
Germany	.14
Argentine Republic	.06
Netherlands	.06
Belgium	.05
France	.05
All other countries	.55

LEATHER AND ITS MANUFACTURES.

Chart 64—Leather, Tanned, Curried and Finished. Pennsylvania produces over one-fourth, and Massachusetts one-eighth of the leather output, New York and Wisconsin following. Philadelphia is the leading city followed by Newark, Milwaukee and Wilmington. Wisconsin leads in the output of rough leather, Pennsylvania in sole leather and goatskins and Massachusetts in calfskin and upper leather.

Chart 65—Exports of Leather. The United Kingdom purchased over two-thirds of all the leather exported from the United States.

Chart 66—Boots and Shoes. Massachusetts manufactures nearly one-half of all the shoes made in factories in the United States, New York, New Hampshire, Pennsylvania and Maine following in the order of the value of products. The leading cities are Brockton, Lynn, Haverhill—all in Massachusetts. This industry is gaining rapidly in the West, Cincinnati, St. Louis, Chicago, Columbus, Milwaukee and other western cities having large establishments. There were 219,000,000 pairs of shoes, gaiters, etc., made in the United States during the census year.

Chart 67—Exports of Boots and Shoes. The United Kingdom and British Australasia buy over half of the exports of shoes from the United States, followed by Canada, Mexico and Cuba. Improved machinery has enabled the United States to make shoes cheaper than any other country.

Chart 68—Saddlery and Harness. This industry is widely distributed, only one-fourth being carried on in the larger cities. Chicago leads, Dallas, Texas, ranks above Baltimore and Philadelphia.

United States Manufactures in 1900

Leather, Tanned, Curried and Finished

Value of products, $204,000,000

64

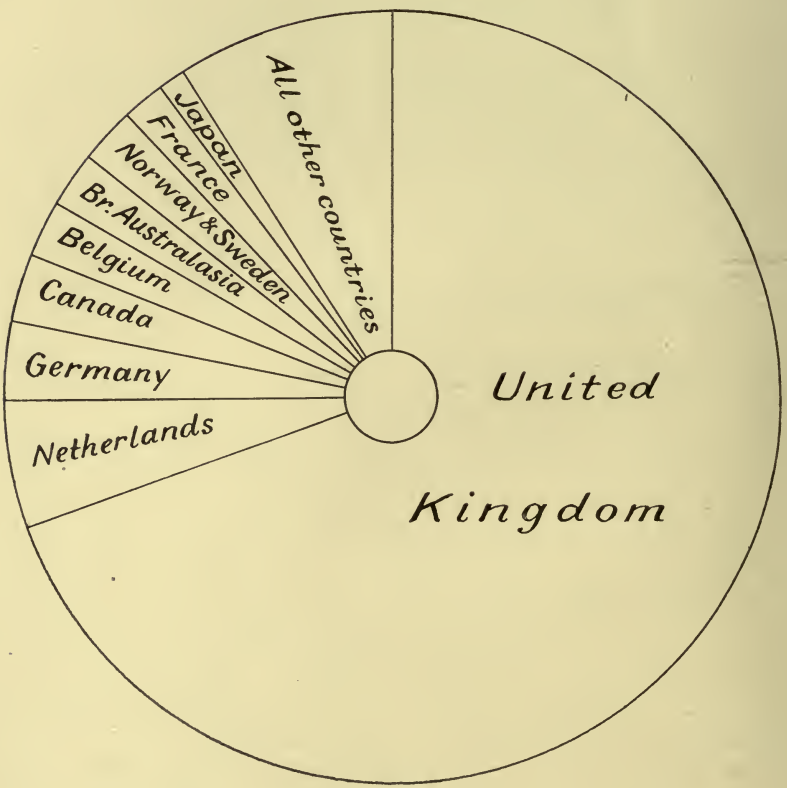
(Values given in Millions of Dollars.)

Philadelphia	18.0
Newark, N. J.	10.8
Milwaukee	10.2
Wilmington, Del.	9.3
Chicago	6.9
Cincinnati	3.4
New York	3.3
Louisville	3.1
Salem, Mass.	3.0
San Francisco	2.7
Lynn, Mass.	2.4
All other cities and outside places	130.9

United States Exports in 1901

Leather

$21,300,000



65

(Values given in Millions of Dollars.)

United Kingdom	14.8
Netherlands	1.1
Germany	0.7
Canada	0.6
Belgium	0.5
British Australasia	0.5
Norway and Sweden	0.5
France	0.4
Japan	0.2
All other countries	2.0

United States Manufactures in 1900

Boots and Shoes

Value of products, $261,000,000

66

(Values given in Millions of Dollars.)

Brockton, Mass.	19.0	Manchester, N. H.	4.0
Lynn, Mass.	17.0	Boston	3.8
Haverhill, Mass.	15.0	Columbus, O.	3.5
New York	9.0	Salem, Mass.	2.9
Cincinnati	8.8	North Adams, Mass.	2.8
St. Louis	8.2	Newark, N. J.	2.5
Rochester, N. Y.	7.0	Milwaukee	2.1
Philadelphia	5.9	All other cities and outside places,	143.8
Chicago	5.7		

United States Exports in 1901

Boots and Shoes

$5,520,000

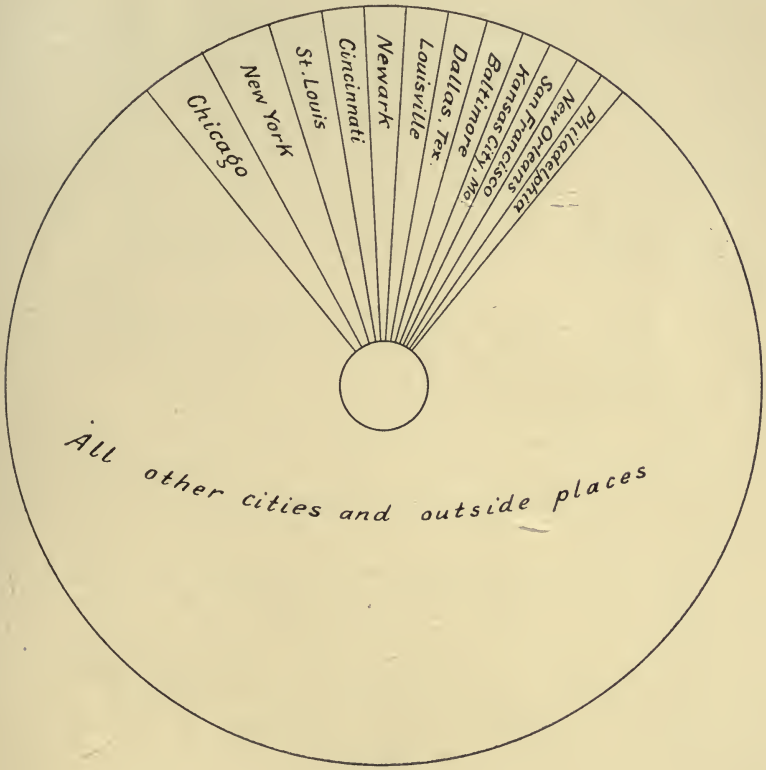
(Values given in Millions of Dollars.)

United Kingdom	1.55
British Australasia	1.42
Canada	.43
Mexico	.42
Cuba	.34
British West Indies	.25
Germany	.18
British Africa	.18
Colombia	.06
British Honduras	.06
All other countries	.63

United States Manufactures in 1900

Saddlery and Harness

Value of products, $62,000,000



68

(Values given in Millions of Dollars.)

Chicago	1.9
New York	1.8
St. Louis	1.4
Cincinnati	1.2
Newark, N. J.	1.1
Louisville	1.1
Dallas, Texas	1.0
Baltimore	1.0
Kansas City, Mo.	0.9
San Francisco	0.7
New Orleans	0.7
Philadelphia	0.7
All other cities and outside places	48.5

Chart 69—Paper and Wood Pulp. This is given by counties, as many of the larger paper and wood pulp establishments are not in cities. The New England States and New York have the main spruce supplies of the United States which are so necessary in the manufacture of wood pulp. New York, Massachusetts, Maine, Pennsylvania and Wisconsin follow in the value of products in the order given. Hampden County, Massachusetts, in which Holyoke, the largest paper manufacturing city, is located, leads in value of product.

Chart 70—Glass. Nearly five-sevenths of the glass factories are found outside of the leading cities. Pittsburg leads, and all of the cities given, excepting Millville and Philadelphia, are located either in the gas belt of Pennsylvania or Indiana.

Chart 71—Exports of Glassware. One-half of the glass exported is sent to Great Britain and her Colonies, over one-fourth going to Canada alone. Mexico ranks next to Canada, taking about one-fifth.

Chart 72—Exports of Paints. Great Britain and her Colonies buy over one-half the exports, Germany and France together, about one-sixth.

Chart 73—Pottery and Terra Cotta. While the manufacture of this class of products is increasing, most of the finest products are still imported, but the success of the Rookwood and Newcomb Potteries gives promise of an increased demand for the art production of the United States. The value of pottery products amounted, in 1900, to about $18,000,000, and of terra cotta to $26,000,000. The two great pottery centres are East Liverpool, Ohio, and Trenton, New Jersey. These two produce about one-half of the pottery made in the United States.

United States Manufactures in 1900

Paper and Wood Pulp

Value of products, $127,000,000

(Values given in Millions of Dollars.)

Hampden Co., Mass.	10.3
Coos Co., N. H.	4.9
Outagamie Co., Wis.	4.8
Saratoga Co., N. Y.	4.7
Jefferson Co., N. Y.	3.8
Washington Co., N. Y.	3.7
Worcester Co., Mass.	2.9
Niagara Co., N. Y.	2.8
Philadelphia Co., Pa.	2.6
Cumberland Co., Me.	2.5
Berkshire Co., Mass.	2.5
All other counties	81.5

United States Manufactures in 1900

Glass

Value of products, $56,000,000

(Values given in Millions of Dollars.)

Pittsburg, Pa.	2.4
Muncie, Ind.	2.3
Millville, N. J.	1.6
Marion, Ind.	1.3
Philadelphia	1.3
Washington, Pa	1.3
Tarentum, Pa.	1.1
Gas City, Ind.	1.0
Alexandria, Ind.	1.0
Elwood, Ind.	1,0
Charleroi, Pa.	1.0
All other cities and outside places	40.7

United States Exports in 1901

Glassware

$2,000,000

71

(Values given in Millions of Dollars.)

Canada	0.61
Mexico	.41
British Australasia	.24
United Kingdom	.24
Cuba	.12
Germany	.04
Argentine Republic	.04
Brazil	.03
Chile	.05
All other countries	.24

United States Exports in 1901

Paints

$2,000,000

72

(Values given in Millions of Dollars.)

United Kingdom	0.67
Canada	.26
Germany	.20
France	.14
British Australasia	.13
All other countries	.60

United States Manufactures in 1900

Pottery, Terra Cotta and Fireclay Products

Value of products, $44,000,000

73

(Values given in Millions of Dollars.)

Trenton	4.7
East Liverpool, O	4.1
Pittsburg	2.1
St. Louis	1.2
Zanesville, O.	1.2
New York	1.1
Akron, O.	.8
Philadelphia	.5
All other cities and outside places	28.3

Chart 74—Jewelry. This industry is carried on almost entirely in cities, and chiefly in the East. Providence produces 27.6 per cent., New York 21 per cent., Newark 15.8 per cent., and the Attleboros 18 per cent.

Chart 57—The Exports of Jewelry. Canada buys over one-half of all the jewelry exported from the United States.

Chart 76—Brass Castings and Finishings. This industry, like jewelry, is largely confined to cities, Waterbury and Bridgeport, both in Connecticut, producing over one-fourth.

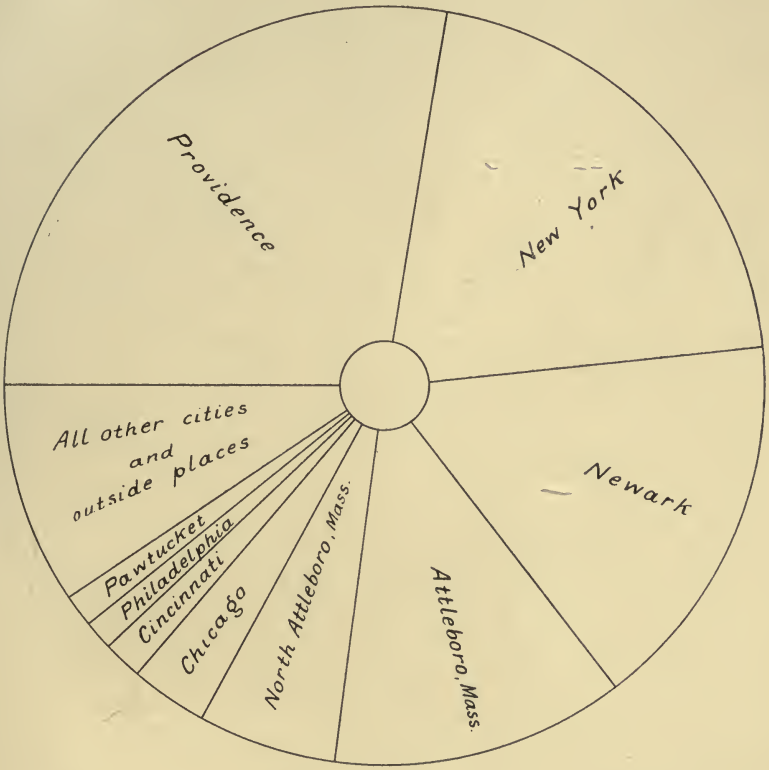
Chart 77—Exports of Brass and its Manufactures. Three-fourths of these are exported to Canada, the United Kingdom and Germany.

Chart 78—Exports of Clocks and Parts. The value of clocks made in the United States is about $7,000,000, over 60 per cent. of which is made in Connecticut. Of the exports of clocks and parts 82 per cent. are sold to Great Britain and her Colonies.

United States Manufactures in 1900

Jewelry

Value of products, $46,000,000



(Values given in Millions of Dollars.)

Providence	12.7
New York	9.7
Newark, N. J.	7.3
Attleboro, Mass.	5.7
North Attleboro, Mass.	2.7
Chicago	1.6
Cincinnati	.8
Philadelphia	.6
Pawtucket, R. I.	.6
All other cities and outside places	4.3

United States Exports in 1901

Jewelry

$1,000,000

75

(Values given in Millions of Dollars.)

Canada	0.58
United Kingdom	.13
British Australasia	.11
Mexico	.02
Cuba	.02
All other countries	.14

United States Manufactures in 1900

Brass Castings and Finishing

Value of products, $30,000,000

76

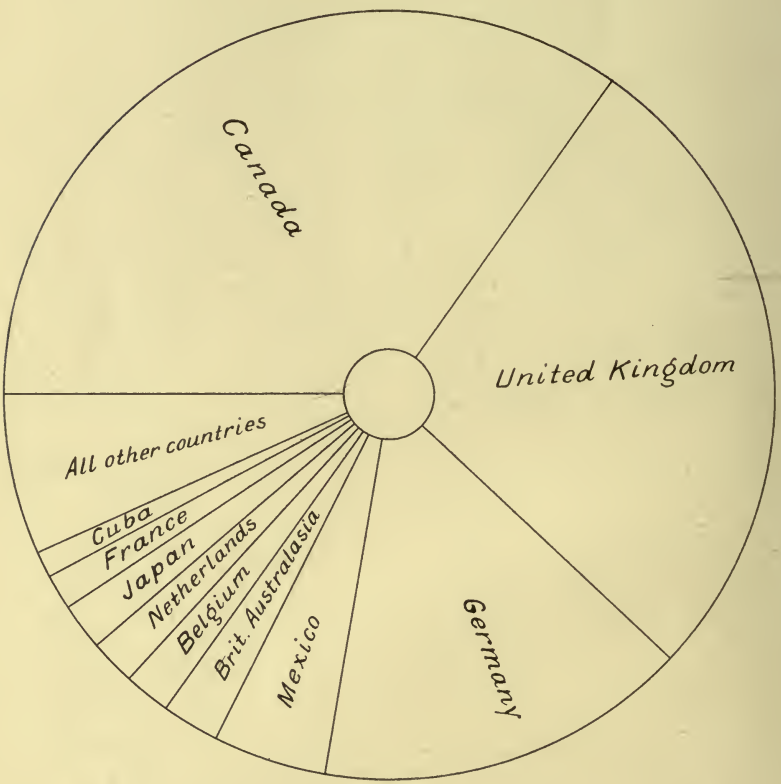
(Values given in Millions of Dollars.)

Waterbury, Conn.	5.1
Bridgeport, Conn.	4.1
Philadelphia	2.6
Detroit	1.6
Chicago	1.3
New York	1.3
St. Louis	1.1
Milwaukee	.9
Jersey City	.9
San Francisco	.7
Cincinnati	.5
All other cities and outside places	9.9

United States Exports in 1901

Brass and its Manufactures

$2,000,000



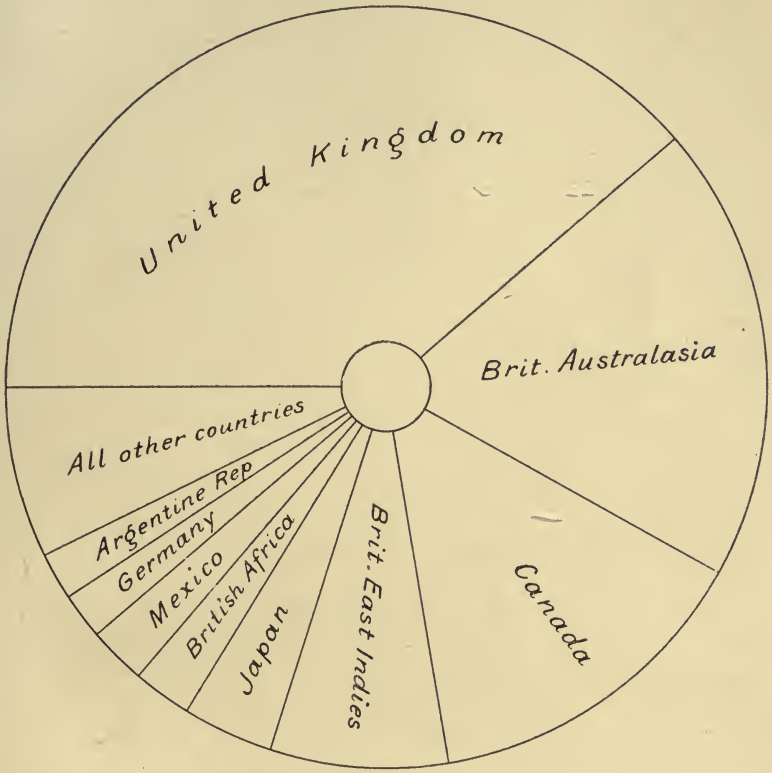
(Values given in Millions of Dollars.)

Canada	0.70
United Kingdom	.54
Germany	.31
Mexico	.09
British Australasia	.05
Belgium	.04
Netherlands	.04
Japan	.04
France	.03
Cuba	.02
All other countries	.14

United States Exports in 1901

Clocks and Parts

$1,200,000



78

(Values given in Millions of Dollars.)

United Kingdom	0.47
British Australasia	.23
Canada	.17
British East Indies	.09
Japan	.05
British Africa	.03
Mexico	.03
Germany	.02
Argentine Republic	.02
All other countries	.09

Chart 79—Carriages and Wagons. Three-fourths of the carriages and wagons are made outside of the leading cities. Ohio, Indiana, Michigan and Illinois near the hard wood forests are the leading states. Cincinnati makes more carriages than any other city. South Bend, Indiana, and Racine, Wisconsin, having excellent facilities for reaching Chicago and other large cities, are prominent centers of this manufacture.

Chart 80—Exports of Carriages and Parts. Two-thirds of this class of exports are sold to Great Britain and her Colonies. The imports of carriages have decreased and the exports of carriages and parts increased during the last ten years.

Chart 81 Agricultural Implements. The distribution of establishments manufacturing agricultural implements is not determined by the rank of the state in agriculture, for Kansas, one of the largest agricultural states, has few establishments manufacturing agricultural implements. The nearness to hard wood forests has caused a rapid increase, in this industry, in the Central West. Illinois makes 40 per cent. of all the agricultural implements made in the United States, Chicago, alone, making nearly one-fourth Chicago's importance is due to its manufacture of harvesting implements, South Bend's to its manufacture of plows. In 1900 there were 819,000 walking plows, 136,000 sulky plows, 718,000 scythes, 397,000 mowers, 233,000 harvesters and binders, 295,000 wheel cultivators, 206,000 small cultivators, and 129,000 corn planters manufactured in the United States.

Chart 82—Exports of Agricultural Implements. More than one-half of the exports of agricultural implements is sold to Europe. Germany leads, followed by Canada, France, Great Britain and Russia. Argentina and British Australasia buy less than any of the countries already mentioned.

Chart 83—Electrical Apparatus and Supplies. The manufacture of electrical apparatus and supplies is of recent origin, yet it has grown to be an immense business. The average per capita expenditure on electricity in the United States is $7.00. This includes not only the demand for electrical supplies, but also the cost of electric traction, lighting, power, and for telegraph and telephone.

NewYork, Pennsylvania, Illinois and Massachusetts are the four leading states in this industry, and manufacture over two-thirds of the product. Pittsburg, Chicago and New York are the leading cities.

Chart 84—Exports of Scientific Instruments and Electrical Apparatus. This class of goods is exported mainly to Europe, the United Kingdom, as usual, leading in the amount bought from the United States.

United States Manufactures in 1900

Carriages and Wagons

Value of products, $122,000,000

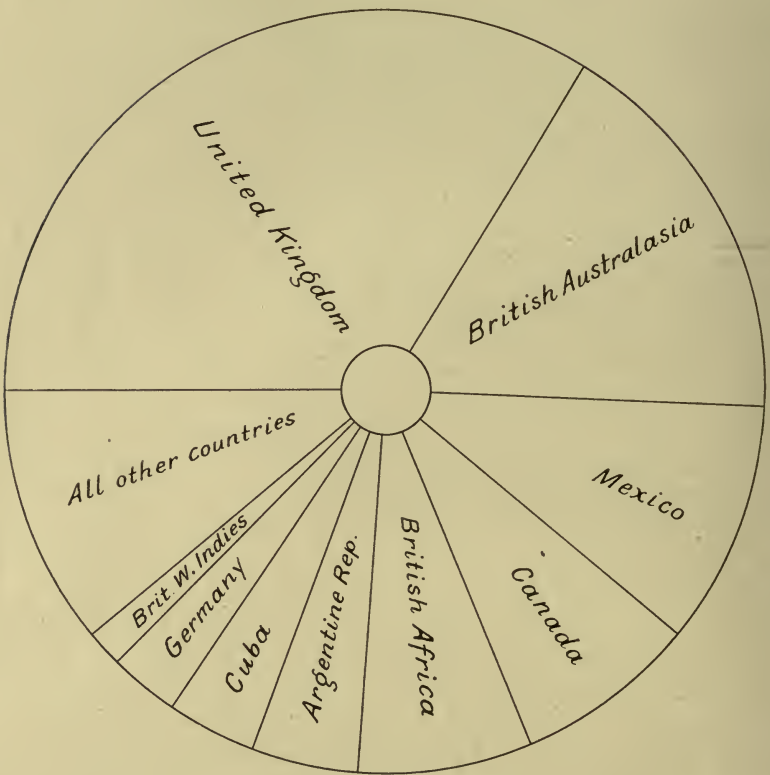
(Values given in Millions of Dollars.)

Cincinnati	6.0
New York	4.3
St. Louis	4.0
Chicago	3.8
South Bend, Ind.	3.4
Racine, Wis.	2.7
Indianapolis	2.2
Columbus, O.	2.1
Philadelphia	1.9
Hartford	1.9
Louisville	1.4
New Haven	1.3
Jackson, Mich.	1.3
All other cities and outside places	85.7

United States Exports in 1901

Carriages and Parts

$2,700,000



80

(Values given in Millions of Dollars.)

United Kingdom	0.92
British Australasia	.46
Mexico	.28
Canada	.21
British Africa	.20
Argentine Republic	.12
Cuba	.10
Germany	.08
British West Indies	.04
All other countries	.29

United States Manufactures in 1900

Agricultural Implements

Value of products, $101,200,000

81

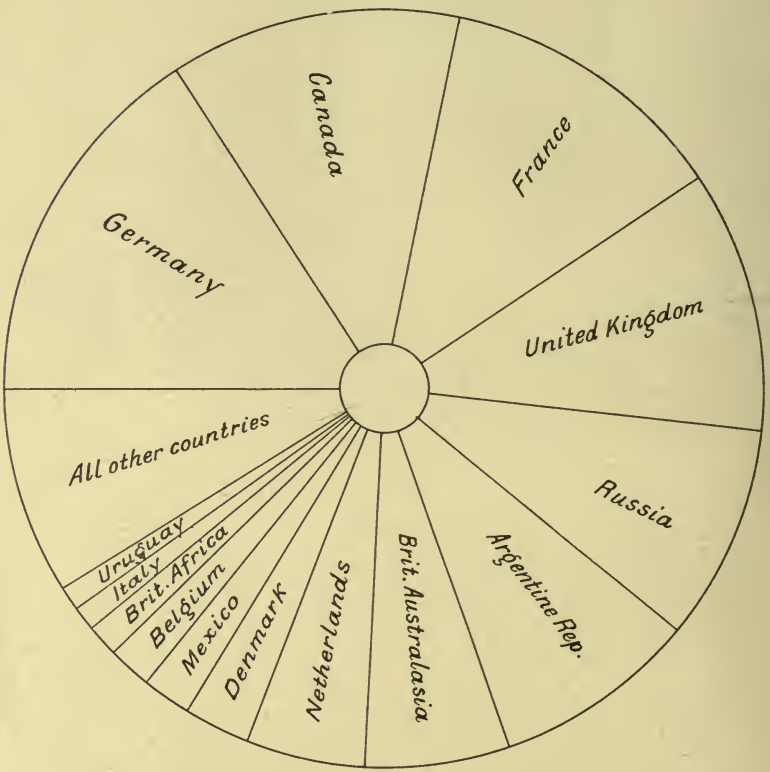
(Values given in Millions of Dollars)

Chicago	24.8
Springfield, O	5.2
Racine, Wis.	3.0
South Bend, Ind.	2.4
Peoria, Ill.	2.3
Milwaukee	2.3
Auburn, N. Y.	2.3
Louisville	1.2
Dayton, O.	1.2
Canton, O.	1.1
Rockford, Ill.	.7
Kansas City, Mo.	.4
Philadelphia	.4
York, Pa.	.4
All other cities	53.5

United States Exports in 1901

Agricultural Implements

$16,310,000



82

(Values given in Millions of Dollars.)

Germany	2.6
Canada	2.0
France	2.0
United Kingdom	1.8
Russia	1.5
Argentine Republic	1.4
British Australasia	1.0
Netherlands	.82
Denmark	.47
Mexico	.34
Belgium	.33
British Africa	.23
Italy	.17
Uruguay	.15
All other countries	1.50

United States Manufactures in 1900

Electrical Apparatus and Supplies

Value of products, $91,000,000

83

(Values given in Millions of Dollars.)

Pittsburg	14.0
Chicago	11.3
New York	10.8
Lynn, Mass.	5.8
Philadelphia	4.2
Cleveland, O.	3.3
Boston	1.2
Newark, N. J.	1.1
All other cities and outside places	39.3

United States Exports in 1901

Scientific Instruments and Electrical Apparatus

$7,360,000

84

(Values given in Millions of Dollars.)

United Kingdom	2.10	Argentine Republic	0.30
Italy	.53	British Africa	.26
British Australasia	.46	Brazil	.26
British East Indies	.40	Cuba	.23
Mexico	.39	Belgium	.20
France	.37	Canada	.18
Japan	.37	Peru	.08
Germany	.36	All other countries	.87

AMERICAN SHIPPING.

According to Lloyd's Register for 1901–2 the gross tonnage of all vessels of over 100 tons belonging to the nations mentioned was as follows:

United Kingdom . . .	13,656,161 tons	Spain	786,355 tons
United States	3,077,344 "	Sweden	676,219 "
Germany	2,905,782 "	Japan	644,664 "
Norway	1,627,220 "	Netherlands	578,109 "
France	1,406,883 "	Denmark	508,194 "
Russia	789,253 "	Austria-Hungary	486,802 "

No other nation has 300,000.

This makes the United States second in the amount of tonnage, but of this, only a small portion is engaged in foreign trade. According to the report of the United States Commissioner of Navigation, which includes vessels of less than 100 tons, there were in the merchant marine of the United States, in 1901, 5,524,000 gross tons, of which only 879,000 tons were engaged in the foreign trade.

The increase in American tonnage has been in the coastwise shipping, including lake tonnage, which latter alone amounts to 1,706,000 tons. This increase is due to the protection given by the law prohibiting the carrying of goods from one American port to another in any but American vessels.

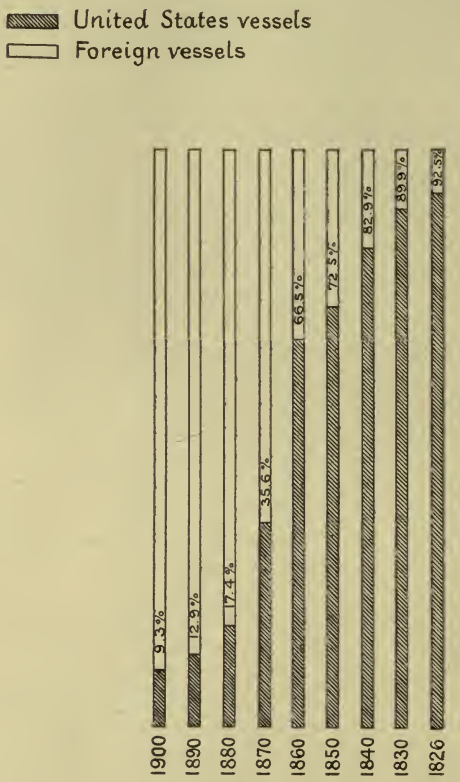
In chart 85, it will be seen that since 1826 there has been a steady decrease in the *percentage* of the foreign trade of the United States carried in American vessels. In 1901 the *value* of the foreign commerce of the United States carried in vessels was nearly ten times as great as it was in 1840, and yet the value of that part of this trade carried in *American vessels* is less now than it was then.

The early fathers believed in protecting American shipping, and by discriminating acts in favor of American vessels, passed in 1789, and the act laying 10 per cent. extra duties on goods coming in foreign ships, passed in 1794, they aided in the wonderful development of the American merchant marine. A large part of this advantage was gradually frittered away by the various free shipping reciprocity acts, ending with that of 1828, which deprived American vessels engaged in foreign trade of all the protection given by the older laws.

In 1847, American Transantlantic steamers were first subsidized, and American vessels not only secured a large share of their own trade, but also an increasing share of that of Great Britain. The withdrawal of these subsidies in 1858 started the rapid decline of American shipping engaged in the foreign trade, which then amounted to 73.8 per cent.

Among other causes affecting adversely American shipping engaged in the foreign trade there may be mentioned—The change from wooden to iron and steel ships at a time when Great Britain had a monopoly of the manufacture of iron and steel; the sale of a number of vessels during the Civil War to lessen the cost of insurance and also to avoid the danger of capture by privateers; the absorption of the money and energies of the country from 1870 to 1900 in developing our manufacturing and mining industries. This latter period was the era of railroad building in the United States, not shipbuilding.

Percentage of Foreign Trade carried in American Vessels



85

United States Tonnage and Foreign Trade

	Shipping in tons	Total Imports and Exports carried in vessels	Total Imports and Exports carried in American vessels
		Values given in Millions of Dollars	
1826	696,000	162	150
1830	537,000	144	129
1840	762,000	249	198
1850	1,439,000	330	239
1860	2,379,000	762	507
1870	1,448,000	991	352
1880	1,314,000	1,482	258
1890	928,000	1,573	202
1900	816,000	2,089	195
1901	879,000	2,151	177

COMPARISON OF BRITISH AND AMERICAN SHIPPING.

Chart 86 gives a comparison of the progress of shipping in the United Kingdom and the United States since 1850, by decades, the amounts being given in thousands of tons. The figures inside the columns represent the total shipping; the figures outside, the shipping engaged in the foreign trade. In each year the column to the left shows the shipping of the United Kingdom and the column on the right that of the United States. United States figures are given in gross tons as those for net tons were not available over so long a period.

Gross tonnage is the entire internal cubical capacity of a vessel in tons of 100 cubic feet each. Net tonnage is obtained by deducting from gross tonnage the space for the accommodation of the crew and that occupied by the machinery. In sailing vessels the difference between the two is not more than 5 per cent., but in steam vessels it may be over 40 per cent.

It will be seen that in 1850 and 1860 the United States gross tonnage was greater than the net tonnage of Great Britain. Since 1860 there has been an extraordinarily large increase in foreign commerce, but the United States share of it has steadily decreased, while that of the United Kingtom has steadily increased until now, considering vessels of over 100 tons, more than half the tonnage of the world floats the British flag.

It is to be hoped that now, when the moneyed interests of the country are looking toward the sea, the United States will, ere long, rapidly increase the American tonnage engaged in the foreign trade. All Americans are pleased to see our merchant princes through their ownership of the International Mercantile Marine Company secure the profits and the control of so many foreign vessels. There is no doubt that these men, in common with many of their fellow citizens, would welcome the day when their fleets would be composed of a larger number of American-built vessels. To bring this result about needs the wisdom and skill of both our greatest merchants and leading statesmen.

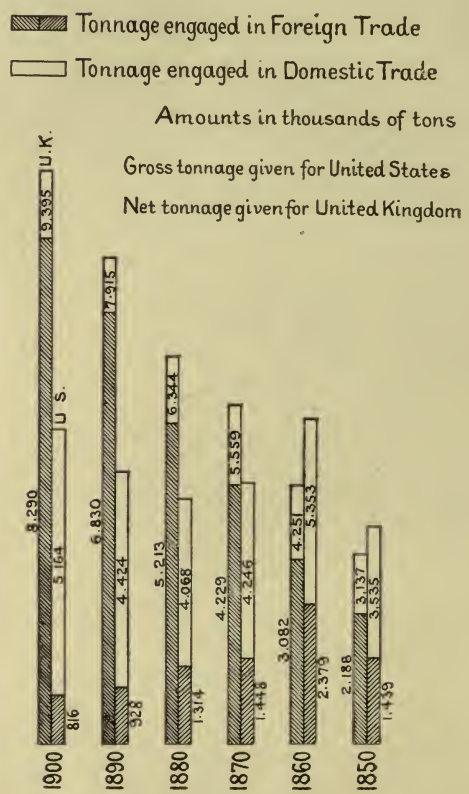
Discriminating duties in favor of American vessels in the early years of the country, and a national subsidy near the middle of the last century were useful in building up our merchant marine.

The statesmen of today should find some method suitable to existing conditions whereby they can aid our merchants in securing for American-built vessels a larger share of our foreign trade.

Objection to government aid to foreign shipping is often made on the ground that it makes no difference to us whether our goods are carried in American or foreign vessels. Those holding this view lose sight of the fact that commerce consists of transportation as well as trade. The cost of freight is an export of the country owning the vessel and an import of the country that has to pay the freight to foreign vessel owners. The money received by ship owners for goods carried in their vessels is as much a credit to their country as money received for goods exported, and money paid by any country to foreign ship owners for freight is as much a debit as money paid for goods imported, and this cost forms an important factor in adjusting the balance of trade.

It has been estimated that the freight and insurance on vessels carrying the foreign trade costs from 10 to 15 per cent. of the value of the goods. If we take the lower estimate the United States pays out about $200,000,000 annually for freight to foreign ship owners. A large part of this should, and under proper laws would, be paid to American owners and in this way decrease the amount payable to foreign countries for our imports.

Comparison of Tonnage of the United Kingdom and the United States since 1850



86

Tonnage of the United Kingdon and the United States.

	UNITED KINGDOM		UNITED STATES	
	Total Tonnage Net	Tonnage in Foreign Trade	Total Tonnage Gross	Tonnage in Foreign Trade
1850 . .	3,137,000 tons	2,188,000 tons	3,535,000 tons	1,439,000 tons
1860 . .	4,251,000 "	3,082,000 "	5,353,000 "	2,379,000 "
1870 . .	5,559,000 "	4,229,000 "	4,246,000 "	1,448,000 "
1880 . .	6,344,000 "	5,213,000 "	4,068,000 "	1,314,000 "
1890 . .	7,915,000 "	6,830,000 "	4,424,000 "	928,000 "
1900 . .	9,395,000 "	8,290,000 "	5,164,000 "	816,000 "

Imports and Exports of Merchandise of Principal Countries during the Years 1892 and 1902

[NOTE.—Years ending December 31, 1892 and 1902, unless stated otherwise; imports for consumption and exports of domestic merchandise, unless stated otherwise.]

COUNTRIES	IMPORTS		EXPORTS	
	1892	1902	1892	1902
	DOLLARS	DOLLARS	DOLLARS	DOLLARS
Argentina	88,279 322	99,432,882	109,402,375	173,204,692
Australia, Comw. of[1]	[2]183,311,064	[2]206,504,316	[2]175,212,872	[2]241,794,530
Austria-Hungary	252,763,703	349,283,319	293,424,916	387,525,845
Belgium	296,536,000	439,282,000	264,302,000	358,464,000
Bulgaria	14,919,000	13,751,000	14,406,000	20,011,000
Canada[1]	107,600,534	205,667,000	99,032,466	207,752,000
Cape of Good Hope	58,290,840	156,261,393	[4]46,170,126	[4]77,051,256
Chile[1]	58,081,000	50,844,865	59,920,000	62,723,425
China[1]	170,386,647	203,420,565	123,156,376	124,528,060
Denmark[1]	89,676,000	106,371,000	66,741,000	78,290,000
Egypt	44,939,191	73,229,003	65,946,135	87,080,846
France	808,295,000	852,235,000	667,922,000	817,725,000
Germany	956,415,000	1,316,609,000	703,078,000	1,158,630,000
Greece	23,026,000	26,034,000	15,876,000	15,466,000
India, British[5]	226,158,402	264,317,582	351,701,230	392,024,708
Italy	226,464,653	342,428,428	184,930,133	284,174,782
Japan	50,321,521	135,117,083	63,825,743	127,326,158
Mexico[6 7]	51,181,158	71,360,000	47,374,537	88,289,000
Netherlands[1]	536,699,411	815,441,770	457,196,822	695,762,588
Norway	53,596,500	78,869,000	31,847,200	45,146,500
Portugal	33,295,000	60,459,000	26,601,000	31,868,000
Russia[3]	202,947,970	269,839,000	378,452,580	422,498,000
Spain	143,511,874	154,106,704	128,450,186	142,314,384
Sweden[1]	98,752,000	123,195,000	86,558,000	94,736,000
Switzerland	167,796,208	217,802,568	126,926,299	168,740,886
United Kingdom[9]	2,062,392,926	2,573,698,572	1,105,748,606	1,379,847,313
United States[9 3]	827,402,462	969,320,000	1,015,732,011	1,360,701,000
Uruguay	19,030,000	24,565,000	26,834,000	33,656,000

1 Years 1891 and 1901, ending December 31.
2 Exclusive of intercolonial trade, but inclusive of specie.
3 Year 1892, ending June 30, and 1902, ending December 31.
4 Including raw gold.
5 Years 1892 and 1902, ending March 31.
6 Year 1891, ending June 30, and 1902, ending December 31.
7 Including bullion and specie.
8 Years 1891 and 1902 ending December 31.
9 General imports.

Manufactures which enter into the international commerce of the world are valued at $4,000,000,000.

The following table shows the total value of manufactured goods imported into and exported from the principal countries of the world:

	Imports of Mfrs.	Exports of Mfrs.
Argentina	$ 67,717,000	$ 704,000
Australia	156,204,000	13,754,099
Austria-Hungary	113,988,000	187,364,000
Belgium	104,210,000	178,840,000
Brazil	43,020,000	43,000
Canada	112,506,000	18,076,000
Denmark	39,855,000	3,882,000
France	212,592,000	508,803,000
Germany	366,669,000	824,051,000
Italy	101,739,000	73,373,000
Japan	$ 69,895,000	$ 59,902,000
Netherlands	241,739,000	231,510,000
Norway	33, 95.000	12,083,000
Portugal	23,986,000	3 366,000
Russia	158,166,000	56,069,000
Spain	57,943.900	41,330,000
Sweden	51,835,000	39,419,000
Switzerland	93,049.000	113,111,000
United Kingdom	725,75 ,000	1,076,046,000
United States	344,876,000	403,631,000

Cities of the United States producing more than Twenty Million Dollars' worth of Manufactured Products in the Census Year,

WITH THE LEADING INDUSTRIES IN EACH.

Amounts given in Millions of Dollars.

Akron, O., 23.—Rubber and elastic goods, 5; fdry. and machine shop products, 2.

Albany, N. Y., 24.—Cars and general shop construction, 2; liquors, malt, 2; printing and publishing, book and job, 1.

Allegheny, Pa., 54.—Iron and steel, 7; foundry and machine shop products, 5; pickles, preserves, etc., 4; slaughtering and meat packing, wholesale, 3.

Baltimore, Md., 161.—Clothing, men's, factory product, 17; fruits and vegetables, canning and preserving, 8; tobacco, chewing, smoking, etc, 7; foundry and machine shop products, 6; tinsmithing, coppersmithing, and sheet iron working, 5; oysters, canning and preserving, 2.

Bayonne, N. J., 39.—Petroleum, refining, 28.

Boston, Mass., 206.—Sugar and molasses, refining, 15; printing and publishing, newspapers and periodicals, 10; foundry and machine shop products, 9; clothing, men's, factory product, 8; printing and publishing, book and job, 8; liquors, malt, 7; clothing, men's, custom work, 6.

Bridgeport, Conn., 37.—Brass castings and finishing, 4; corsets, 3; foundry and machine shop products, 2.

Brockton, Mass., 26.—Boots and shoes (factory), 19; boot and shoe findings, 1.

Brooklyn, N. Y., 342.—Sugar and molasses, refining, 77; fdry. and machine shop products, 18; coffee and spice, roasting and grinding, 14; liquors, malt, 11; clothing, men's (factory), 6; boots and shoes (factory), 5; cordage and twine, 5; plumbing, gas and steam fitting, 5; paints, 4; lumber, planing mill products, 4; tinsmithing, etc., 4; confectionery, 4.

Buffalo, N. Y., 122.—Slaughtering and meat packing, wholesale, 9; foundry and machine shop products, 6; oil, linseed, 6; cars and general shop construction, 4; liquors, malt, 4; soap and candles, 3; flouring and grist mill products, 3; lumber, planing mill products, 3.

Cambridge, Mass., 39.—Foundry and machine shop products, 3; printing and publishing, newspapers and periodicals, 2; printing and publishing, book and job, 1; musical instruments, pianos, etc., 1.

Camden, N. J., 20.—Worsted goods, 2; foundry and machine shop products, 1; oilcloth, floor, 1; leather, tanned, curried and finished, 1.

Chicago, Ill., 888.—Slaughtering and meat packing, wholesale, 248; foundry and machine shop products, 44; clothing, men's, factory product, 36; iron and steel, 31; agricultural implements, 24; cars, steam railroad, 19; printing and publishing, book and job, 18; clothing, men's, custom, 16; liquors, malt, 14; printing and publishing, newspapers and periodicals, 13; coffee and spice, roasting and grinding, 12; furniture (factory), 12.

Cincinnati, O., 157.—Clothing, men's (factory), 11; foundry and machine shop products, 11; slaughtering and meat packing, wholesale, 9; liquors, distilled, 9; boots and shoes (factory), 8; liquors, malt, 6; carriages, etc., 6.

Cleveland, O., 139.—Iron and steel, 24; fdry. and machine shop products, 15; slaughtering and meat packing, wholesale, 7; clothing, women's, factory product, 4; liquors, malt, 4.

Columbus, O., 39—Iron and steel, 5; foundry and machine shop products, 4; boots and shoes, factory product, 3; cars and general shop construction, 2; carriages and wagons, 2.

Dayton, O., 35.—Foundry and machine shop products, 4; cash registers, 4; tobacco, cigars and cigarettes, 1; agricultural implements, 1; slaughtering and meat packing, wholesale, 1.

Denver, Col., 41.—Foundry and machine shop products, 2: flouring and grist mill products. 1; printing and publishing, newspapers and periodicals, 1; liquors, malt, 1; cars and general shop construction. 1.

Detroit, Mich., 100.—Foundry and machine shop products, 8; druggists' preparations, 4; tobacco, chewing, smoking and snuff, 3; iron and steel, 3; slaughtering and meat packing, wholesale, 3.

Elizabeth, N. J., 20.—Foundry and machine shop products, 4.
Fall River, Mass., 43.—Cotton goods, 29; dyeing and finishing textiles, 2.
Grand Rapids, Mich., 24.—Furniture, factory product, 7; flouring and grist mill products 1; foundry and machine shop products, 1.
Hartford, Conn., 31.—Foundry and machine shop products, 3; bicycles and tricycles, 2; carriages and wagons, 1.
Haverhill, Mass., 24.—Boots and shoes (factory), 15; boot and shoe cut stock, 3.
Holyoke, Mass., 26.—Paper and wood pulp, 8; cotton goods, 3; foundry and machine shop products, 1; woolen goods, 1; paper goods, n. e. s., 1.
Indianapolis, Ind., 68.—Slaughtering and meat packing, wholesale, 18; fdry. and machine shop products, 5; flouring and grist mill products, 3; carriages and wagons, 2.
Jersey City, N. J., 77.—Tobacco, chewing, smoking and snuff, 5; slaughtering, wholesale, not including meat packing, 5; cars and general shop construction, 2; chemicals, 2; soap and candles, 2.
Johnstown, Pa., 22.—Iron and steel, 17; fdry. and machine shop products, 1.
Joliet, Ill., 27.—Iron and steel, 13.
Kansas City, Kan., 82.—Slaughtering, etc., wholesale, 73; soap and candles, 1.
Kansas City, Mo., 36.—Flouring and grist mill products, 2; confectionery, 1; printing and publishing, newspapers and periodicals, 1.
Lawrence, Mass., 44.—Worsted goods, 24; cotton goods, 8; flouring mill products, 1; fdry. and machine shop products 1; paper and wood pulp, 1.
Los Angeles, Cal., 21.—Foundry, etc., products, 1; flouring mill products, 1.
Louisville, Ky., 78.—Tobacco, chewing, smoking and snuff, 13; oil, cotton seed and cake, 4; slaughtering and meat packing, wholesale, 4; foundry and machine shop products, 3; leather, tanned, curried and finished, 3.
Lowell, Mass., 44.—Cotton goods, 17; foundry and machine shop products, 4; woolen goods, 3; hosiery and knit goods, 3; patent medicines, etc., 1.
Lynn, Mass., 41.—Boots and shoes, factory product, 16; boot and shoe cut stock, 7; electrical apparatus and supplies, 5; leather, tanned, curried and finished, 2; patent medicines and compounds, 1.
McKeesport, Pa., 37.—Iron and steel, 34.
Manchester, N. H., 26.—Cotton goods, 11; boots and shoes, factory product, 4.
Milwauke, Wis., 123.—Foundry and machine shop products, 14; liquors, malt, 13; leather, tanned, curried and finished, 10; iron and steel, 7; flouring and grist mill products, 6; slaughtering and meat packing, wholesale, 5; clothing, men's, factory product, 3.
Minneapolis, Minn., 110.—Flouring and grist mill products, 49; lumber and timber products, 12; foundry and machine shop products, 2; lumber, planing mill products, 2; oil, linseed, 2.
Newark, N. J., 126.—Leather, tanned, curried and finished, 10; liquors, malt, 8; jewelry, 7; foundry and machine shop products, 5; fur hats, 3; chemicals, 3; slaughtering and meat packing, wholesale, 3.
New Bedford, Mass., 25.—Cotton goods, 16.
New Haven, Conn., 40.—Hardware, 2; corsets, 1; foundry and machine shop products, 1; cars and general shop construction, 1; carriages and wagons, 1.
New Orleans, La., 63.—Sugar and molasses, refining, 22; bags, other than paper, 3; rice, cleaning and polishing, 2; foundry and machine shop products, 2; clothing, men's, factory product, 2.
New York, N. Y., 975 (Manhattan and Bronx).—Clothing, women's, (factory), 99; clothing, men's, (factory), 97; printing and publishing, newspapers and periodicals, 49; tobacco, cigars, etc., 35; slaughtering, wholesale, not including meat packing, 33; printing and publishing, book and job, 25; liquors, malt, 24; foundry and machine shop products, 21; millinery and lace goods, 20; clothing, men's, custom, 18; furnishing goods, men's, 17.
Omaha, Neb., 43.—Liquors, malt, 1.
Omaha, South, Neb., 70.—Slaughtering and meat packing, wholesale, 67.
Paterson, N. J., 52.—Silk and silk goods, 26; foundry and machine shop products, 5; dyeing and finishing textiles, 3; liquors, malt, 1.
Pawtucket, R. I., 24.—Cotton goods, 4; worsted goods, 3; foundry and machine shop products, 1; dyeing and finishing textiles, 1.
Peoria, Ill., 48.—Liquors, distilled, 26; agricultural implements, 2; cooperage, 1; foundry and machine shop products, 1.

Philadelphia, Pa., 603.—Foundry and machine shop products, 38; sugar and molasses, refining, 36; carpets and rugs, other than rag, 21; clothing, men's, factory product, 18; woolen goods, 18; leather, tanned, curried and finished, 18; worsted goods, 16; cotton goods, 15; printing and publishing, newspapers and periodicals, 13; hosiery and knit goods, 13; liquors malt, 12; printing and publishing, book and job, 10.

Pittsburg, Pa., 203.—Iron and steel, 90; foundry and machine shop products, 15; electrical apparatus and supplies, 14; ironwork, architectural and ornamental, 6; liquors, malt, 3; marble and stone work, 3.

Portland, Or., 23.—Lumber and timber products, 3; flouring and grist mill products, 1; slaughtering and meat packing, wholesale, 1.

Providence, R. I., 88.—Worsted goods, 16; jewelry, 12; foundry and machine shop products, 9; silverware, 3; gold and silver, reducing and refining, 3.

Pueblo, Cal., 30.—Lead, smelting and refining, 19; foundry and machine shop products, 1.

Reading, Pa., 36.—Iron and steel, 9; cars and general shop construction, 6; foundry and machine shop products, 2; tobacco, cigars and cigarettes, 1; hardware, 1.

Richmond, Va., 28.—Tobacco, chewing, smoking, and snuff, 5; tobacco, cigars and cigarettes, 4; foundry and machine shop products, 2; fertilizers, 1.

Rochester, N. Y., 69.—Clothing, men's, factory product, 11; boots and shoes, factory product, 6; foundry and machine shop products, 4; tobacco, cigars and cigarettes, 3; flouring and grist mill products, 3.

St. Joseph, Mo., 31.—Slaughtering and meat packing, wholesale, 19; clothing, men's, factory product, 1.

St. Louis, Mo., 233.—Tobacco, chewing, smoking and snuff, 24; slaughtering and meat packing, wholesale, 12; liquors, malt, 11; foundry and machine shop products, 11; boots and shoes, factory product, 8; clothing, men's, factory product, 5; printing and publishing, newspapers and periodicals, 5; cars, steam railroad, 4.

St. Paul, Minn., 38.—Printing and publishing, newspapers and periodicals, 2; cars and general shop construction, 2; foundry and machine shop products, 2; fur goods, 1.

San Francisco, Cal., 133.—Sugar and molasses, refining, 11; foundry and machine shop products, 8; slaughtering and meat packing, wholesale, 5; slaughtering, wholesale, not including meat packing, 4; tinsmithing, coppersmithing, etc., 4; bottling, 4; flouring and grist mill products, 3; printing and publishing, newspapers and periodicals, 3; clothing, men's, factory product, 3; clothing, men's, custom work, 3.

Scranton, Pa., 27.—Iron and steel, 10; silk and silk goods, 3; foundry and machine shop products, 1; liquors, malt, 1.

Seattle, Wash., 26.—Slaughtering and meat packing, wholesale, 3; lumber and timber products, 2; flouring and grist mill products, 1.

Somerville, Mass., 21.

Springfield, Mass., 21.—Foundry. etc., products, 1; paper goods, n. e. s., 1.

Syracuse, N. Y., 31.—Clothing, men's, factory product, 2; foundry and machine shop products, 2; iron and steel, 1; liquors, malt, 1.

Terre Haute, Ind., 27.—Liquors, distilled, 16; flouring mill products, 1.

Toledo, O., 37.—Flouring mill products, 4; fdry. and machine shop products, 2; bicycles and tricycles, 1; liquors, malt, 1; tinsmithing, etc., 1.

Trenton, N. J., 31.—Iron and steel, 13; pottery, terra cotta, etc., 4; rubber and elastic goods, 1.

Troy, N. Y., 28.—Furnishing goods, men's, 8; shirts, 4; foundry and machine shop products, 1; liquors, malt, 1.

Washington, D. C., 47.—Printing and publishing, book and job, 5; engraving, steel, 2; ordnance and ordnance stores, 2; plumbing and gasfitting, 1; printing and publishing, newspapers and periodicals, 1.

Waterbury, Conn , 33.—Brassware, 8; brass castings and finishing, 5.

Wilmington, Del., 34.—Leather, tanned, curried and finished, 9; foundry and machine shop products, 3; cars, steam railroad, 3; iron and steel, 2; cars and general shop construction, 1.

Worcester, Mass., 53.—Foundry and machine shop products, 8; boots and shoes, factory product, 1; woolen goods, 1; wirework, 1.

Youngstown, O., 34.—Iron and steel, 28; fdry. and machine shop products, 1.

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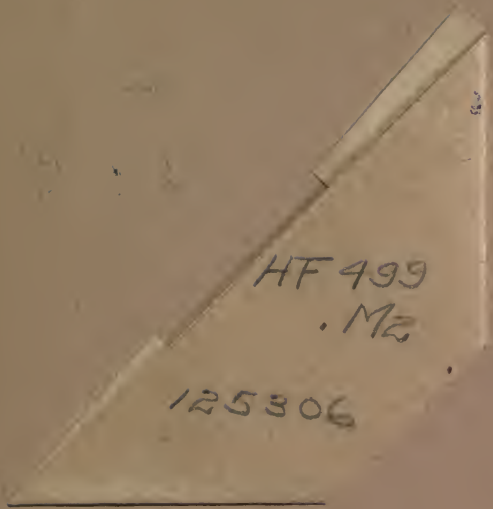
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